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1978 PLANT SURVEY OF THE ISLAND PARK GEOTHERMAL STUDY AREA



CONTRACTED BETWEEN

US FOREST SERVICE AND

WESTERN ENVIRONMENTAL RESEARCH ASSOCIATES (POCATELLO, ID?)

REPORT PREPARED BY GORDON WHITEHEAD KARL E. HOLTE, STUDY DIRECTOR

INTRODUCTION

During the summer of 1977, we did field work to determine the status of certain threatened or endangered plant species and to make as complete a plant collection as possible within the Island Park Geothermal Study Area (figure 1). Due to the timing of the study period, the 1977 report left the status of two species, Claytonia flava A. Nels. and Oenothera psammophila Nels. & Macbr.*, in doubt. The present report contains findings of field work conducted in the spring and summer of 1978. These studies were designed to clear up questions about the two doubtful species and to make the plant collection for the study area more complete.

The report includes a section on methods and a description and analysis of searches for the two species noted above. Following the report proper is a plant list for the study area, revised to include corrections and additional species collected in the summer of 1978. For convenient reference, a copy of the 1977 report, excluding photographs and plant list, is appended. This appendix includes a description of the study area, findings on other threatened or endangered plants and a description of vegetation zones used in compiling the plant lists.

METHODS

Thirty-eight days were spent in the field during the official study period of April 1st through July 31st 1978. Reconnaisance trips were made every two weeks beginning March 18th until snow cover had receded enough for

^{*}Listed in Hitchcock and Cronquist, Flora of the Pacific Northwest as Claytonia lanceolata Pursh var. flava (A. Nels.) C.L. Hitchc. and Oenothera caespitosa Nutt. var. psammophila (Nels. & Macbr.) Munz.

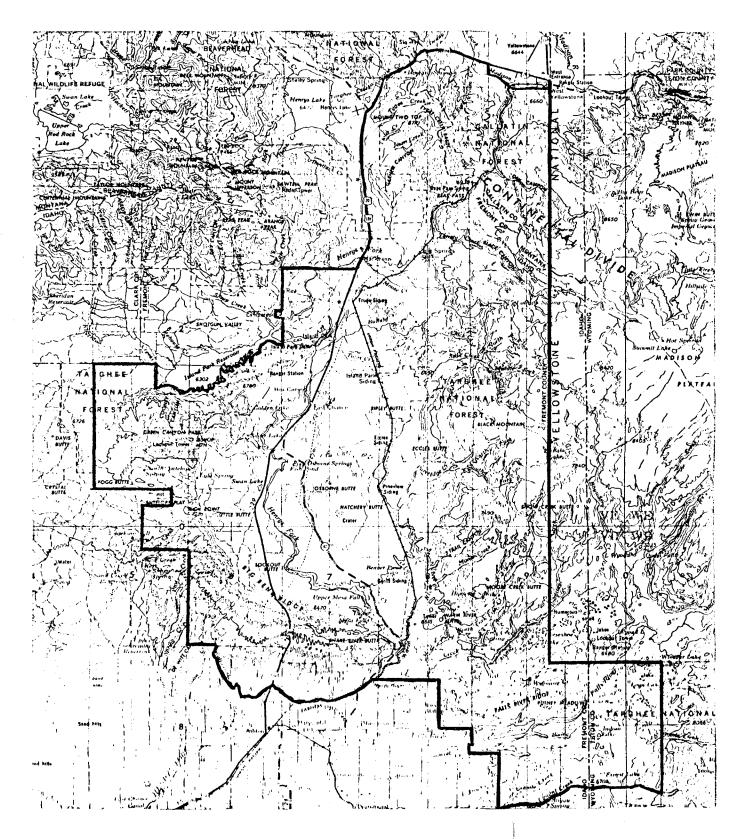


Figure 1

The Island Park Geothermal
Study Area

searches to begin.

The original plan was to provide exstensive plant lists for each forest habitat type within the study area. Unfortunately it soon became clear that this was not compatible with necessarily wide-ranging plant searches. Mosaics of types often existed along slopes where exposure changed subtly and frequent-ly. Also individual searches usually included several habitat types as well as various non-forested areas, and it was impossible to sort out forest types, ecotones, and 'other' habitats effectively while searching a reasonable amount of territory looking for and collecting plants. For these reasons, the general search plan was revised so that the study area would be searched more or less evenly geographically, emphasizing likely habitats for the two plants specifically sought.

Individual search strategies were directed at <u>O. psammophila</u> and <u>C. flava</u>. The plants were sought outside of the study area where they had been collected before. Once located, searches were made in similar habitats closer to the study area until the plant either ceased to occur or was found inside the study area.

As in the previous study, field work was done by Gordon Whitehead, who also identified and processed plants at the Ray J. Davis Herbarium at Idaho State University. Dr. Karl E. Holte directed the study and made final determinations of plant identifications.

THREATENED OR ENDANGERED PLANT FINDINGS

Claytonia flava and Oenothera psammophila were the primary objects of field searches. As footnoted in the introduction, both have been reduced tax-onomically to varieties of Claytonia lanceolata and Oenothera caespitosa respectively. Since other varieties of these species will be mentioned in this section, I will, for clarity's sake, refer to Claytonia flava as C. lanceolata var. flava, and to Oenothera psammophila as O. caespitosa var. psammophila.

A search was made for <u>C</u>. <u>lanceolata</u> var.<u>flava</u> at Staley Springs, on the northwest corner of Henry's Lake, where it had been collected by Dr. Ray J. Davis in the spring of 1962. Although <u>C</u>. <u>lanceolata</u> var. <u>lanceolata</u> Pursh, differing from <u>C</u>. <u>lanceolata</u> var. <u>flava</u> in having white instead of yellow flowers, was common there, no trace of <u>C</u>. <u>lanceolata</u> var. <u>flava</u> was found. Another search near the south end of Henry's Lake was also fruitless. A search along Highway 191 through Henry's Lake Flats and on the periphery of the flats along Meadow Creed Road revealed <u>C</u>. <u>lanceolata</u> var. <u>lanceolata</u>, often in abundance, but, again, <u>C</u>. <u>lanceolata</u> var. <u>flava</u> was not found. In an attempt to more precisely locate Davis' 1962 collection sites, he was contacted by phone. However, he could not remember any more than was on the collection labels.

The negative results of these searches lead us to the conclusion that C. lanceolata var. flava does not exist in the study area. Its absence casts doubt on its continued existence anywhere. Certainly the latter possibility needs further investigation, but human impacts such as residential development and lawn mowing in the Staley Springs area decrease the likelihood of its survival.

O. caespitosa var. psammophila was sought on the sand dunes north and west of St. Anthony, Idaho. The plant was found among the dunes on barren lava outcroppings surrounded by sand and well within the boundary of the larger dune masses. Figure 2 shows areas searched with a blackened circle in each of the areas where O. caespitosa var. psammophila was found. Specific collection sites are shown in detail in figures 3, 4 and 5. Plates 1 through 4 are photographs of the plant and its habitat.

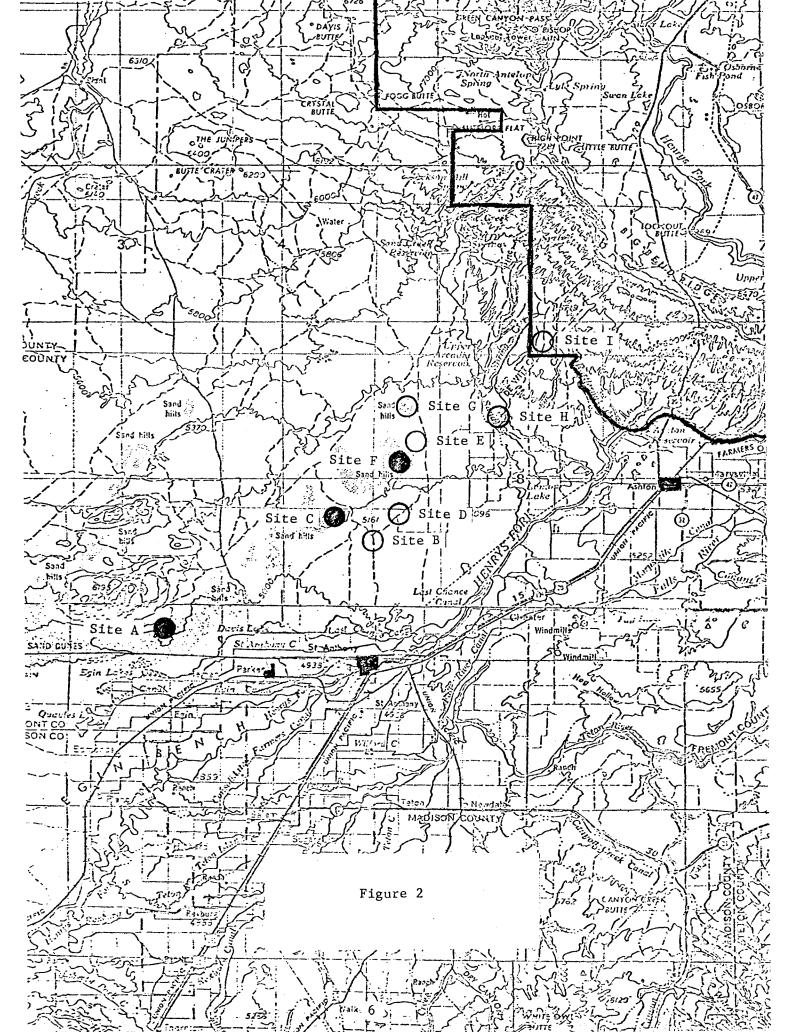
The searches clearly indicate that <u>O</u>. <u>caespitosa</u> var. <u>psammophila</u> exists only in very narrowly defined habitats within large dune masses and that there are no populations within the geothermal study area. The typical

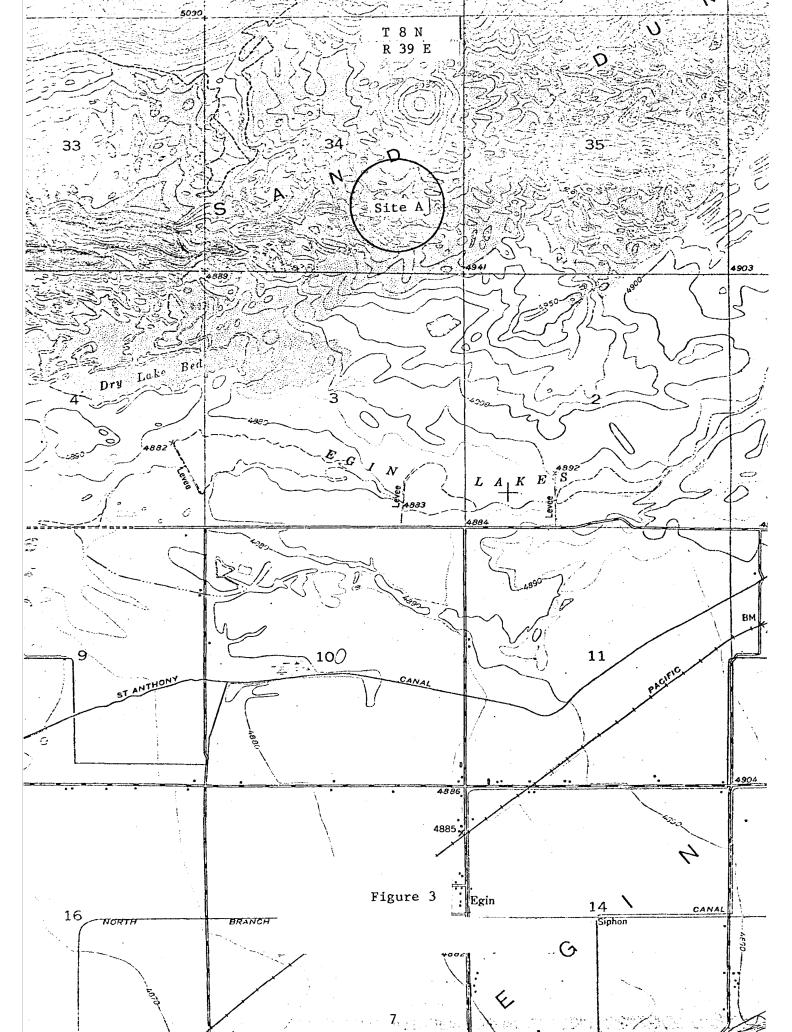
habitat, shown in plate 4, does not exist within the study area boundary, and is marginally present at best in the small sand dunes at sites G and H (figure 2).

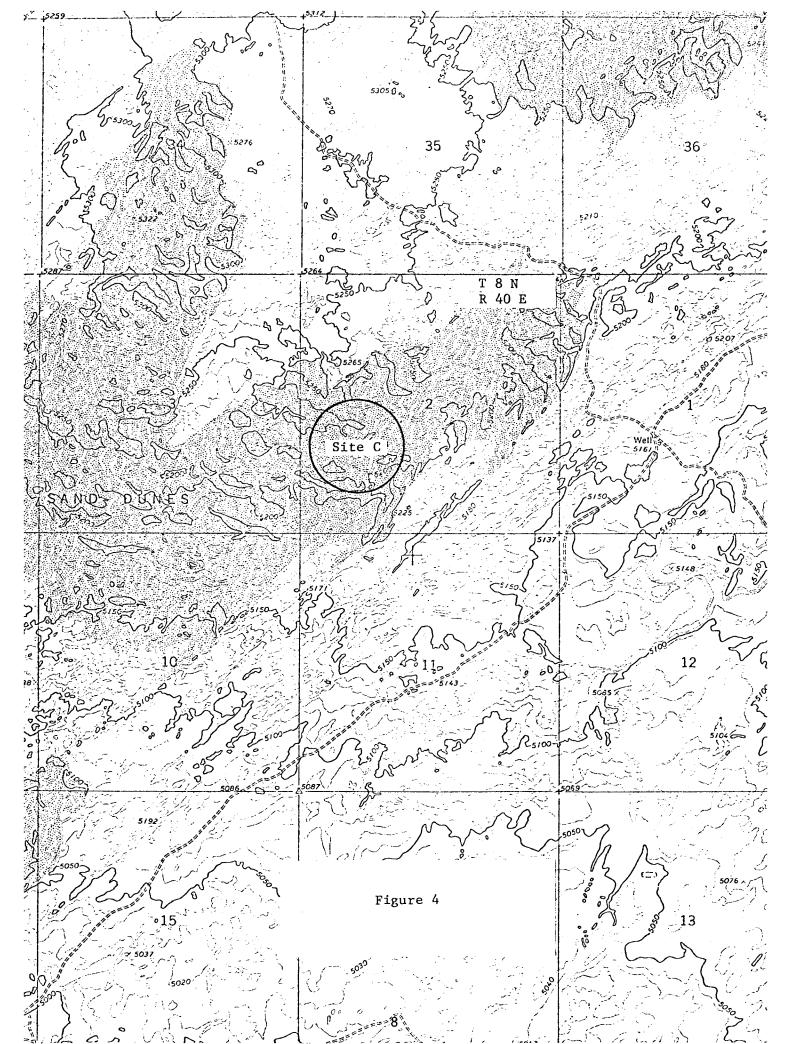
In brush communities near the dunes (figure 2, sites B and E) another variety, O. caespitosa var. marginata (Plate 5), was found associated with disturbed areas such as rock outcroppings and ant mounds. Despite the proximity of the two varieties (I found them as close as one mile apart), they appear to be distinct in both morphology and habitat preference. The part of the geothermal study area nearest the dunes (figure 2, site I) consists of a brush community somewhat similar to that in which O. caespitosa var. marginata was found, but a search of the area revealed neither variety.

From this evidence we have concluded that <u>O. caespitosa</u> var. <u>psammophila</u> does not exist within the geothermal study area. We have also concluded that its northeastern extent is in the large dune mass at Site F (figure 2), and that it is probably restricted to the dunes themselves within its range.

Other threatened or endangered species were kept in mind during the general search of the area, but, as expected from the results of 1977 searches, none were found. Figure 6 is a revised table summarizing our decisions as to the status of all threatened or endangered species sought in the study area. (See appended 1977 report for the original table.)







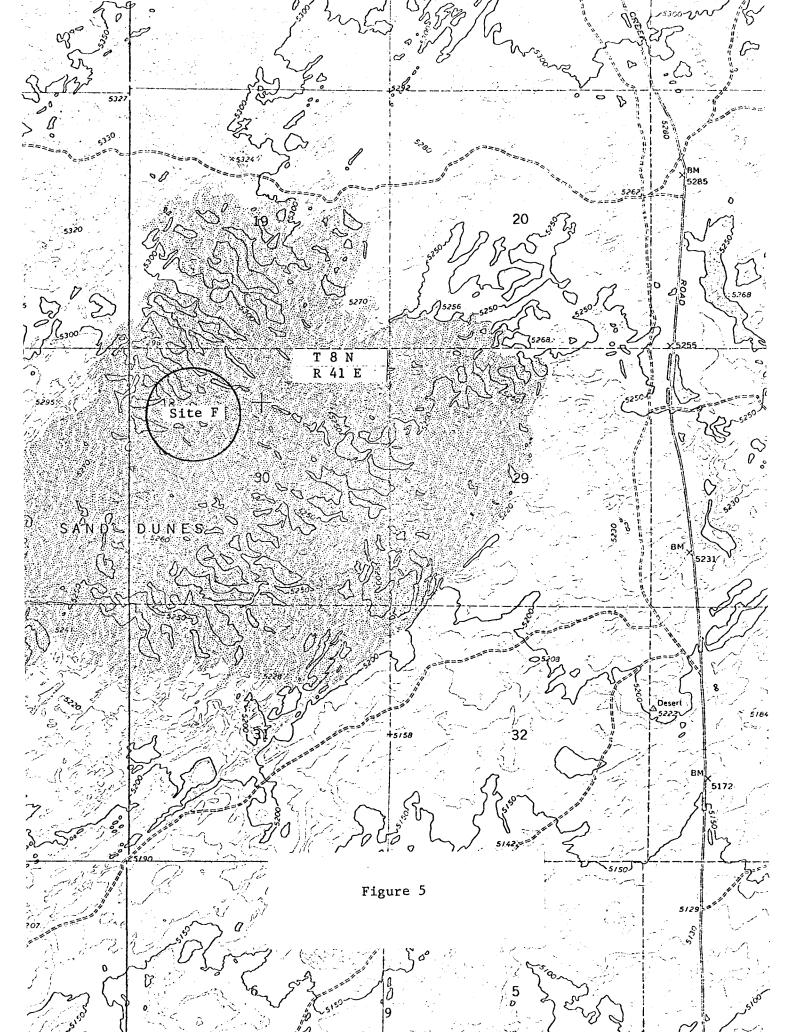




Plate 1. <u>Oenothera caespitosa var.</u> <u>psammophila</u> (Nels. and Macbr.) Munz on sand dunes west of St. Anthony, ID.



Plate 2. The fruits are a distinguishing mark of the variety, being larger and less tuberculate than those of other varieties.



Plate 3. Rocky habitats and clumped growth form are characteristic.



Plate 4. Typical habitat: this outcropping is totally surrounded by sand and is about 100 yards from the brush community in the background.



Plate 5. Oenothera caespitosa var. marginata (Nutt.) Munz grows in brush communities near the dunes.

PLANT	PROBABLE STATUS IN THE AREA	REASONS CITED
Antennaria arcuata	does not inhabit	Restriction of range. Field searches.
Arabis fruticosa	does not inhabit	No longer locatable in type locality. Field searches.
Cymopteris nivalis	does not inhabit	Lack of habitat. Field searches.
Oenothera psammophila (0. caespitosa var. psammophila)	does not inhabit	Ecological restriction to sand dunes, which do not occur in the study area. Thorough field searches in both spring and summer.
Aquilegia jonesii	does not inhabit	Lack of habitat. Field searches.
Astragalus vexilliflexus	does not inhabit	Lack of habitat. Field searches.
Chaenactis evermanii	does not inhabit	Lack of habitat. Field searches.
Claytonia flava (C. lanceolata var. flava)	does not inhabit	Absence from sites of known collections. Thorough field searches in both spring and summer.
Cryptantha hypsophila	does not inhabit	Lack of habitat. Field searches.
Draba argyrae	does not inhabit	Lack of habitat. Field searches.
Draba sphaerocarpa	does not inhabit	Lack of habitat. Field searches.
Synthyris hendersonii	does not inhabit	Lack of habitat. Field searches.

Figure 6

NOTES ON THE PLANT LISTS

The following lists are revised from those of the 1977 report. Plants are listed by vegetation zones as described in that report (see appendix).

Plants collected in 1978 have expanded the list to 554 species. Information on habitat and status have been updated where appropriate.

Nomenclatural corrections have been made as follows:

To correct misidentifications:

Osmorhiza chilensis has been changed to O. occidentalis.

Osmorhiza depauperata has been changed to O. chilensis.

Sambucus cerulea has been changed to S. racemosa.

Anemone nuttalliana has been changed to Clematis hirsutissima.

Physocarpus malvaceus has been changed to Ribes viscosissimum.

To bring nomenclature up to date:

Senecio cymbalarioides Nutt. has been changed to Senecio streptanthifolius Greene.

New labels for these plants are being sent along with this year's collection of plant specimens.

Also, Forest Service maps, which were used in assigning range numbers to the locations of all specimens, were found to be in error, and the list has been corrected to agree with U.S. Geological Survey quadrangle maps. These maps lead to errors only for range numbers for Idaho and Wyoming. The numbers on the Forest Service maps, when in error, were always one (1) greater than those on the USGS maps. Although the list has been corrected, at the time of this report, the specimens sent in with last year's report remain in error.

Although Oenothera caespitosa var. psammophila and var. marginata do not

appear on any of the lists and were not found in the study area, we are including specimens of them in the plant collection because they were an important part of the report.

Plant List for

ZONE 1: SAGEBRUSH - GRASS ZONE

Name	Status	Habitat Information	Known Economic Importance
ACERACEAE			
Acer glabrum Torr. Fremont, ID; T9N R42E SEC 13 NW 4; 5250'	common	Stable shaded canyon sides along Snake River Plains, with <u>Pseudotsuga menziesii</u> and <u>Acer grandidentatum</u> ; or rocky outcroppings on dry sagebrush hillsides, with <u>Populus tremuloides</u> , <u>Prunus virginiana</u> , and <u>Rosa woodsii</u> .	Firewood, game cover.
Acer grandidentatum Nutt. Fremont, ID; T9N R42E SEC 11 NE 1/4; 5300'	common	Stable shaded canyon sides along Snake River Plains; with <u>Pseudotsuga menziesii</u> and <u>Acer glabrum</u> .	Firewood, game cover.
ALISMATACEAE			
Alisma plantago-aquatica L. Teton, WY; T47N R118W SEC 16 SW 1/2; 6500'	common	Shallow standing water at edges of lakes; with Carex aquatilis, Glyceria grandis and Sagittaria cuneata.	Roots are edible.
Sagittaria cuneata Sheld Teton, WY; T47N R118W SEC 4 SW 1/4; 6400'	common	Shallow standing water at edges of lakes; with Alisma plantago-aquatica, Glyceria grandis, Carex aquatilis.	Roots are edible.
APIACEAE			
Cicuta douglasii D.C. Coult. & Rose Fremont, ID; T9N R44E SEC 3 SE 1/4; 5500'	common	Open streambanks often in disturbed areas; with Actea rubra, Urtica dioica and Rubus idaeus; or with Rorippa nasturtium-aquaticum, Glyceria grandis, Carex stipata, and Salix spp.	Extremely poisonous.

Name	Status	Habitat Information	Known Economic Importance
Heracleum lanatum Michx. Teton, WY; T47N R118W SEC 1 SW 4; 6650'	common	Open to shaded streambanks and wet areas; with Populus trichocarpa; Alnus incana, Delphinium occidentale and Allium brevistylum; or with Picea engelmannii, Elymus glanca and Caltha leptosepala.	Stems edible to humans; important sheep and big game browse.
Orogenia linearifolia Wats. Fremont, ID: T9N R42E SEC 12 SE 1/2; 5500'	unknown	Moist bare recently snow free ground; with Artemisia tridentata, Dicentra uniflora and Fritillaria pudica.	Minimal amount of early browse; edible for humans.
Sium sauve Walt. Teton, WY; T47N R118W SEC 16 SW 4; 6520'	common	Abundant at edges of lakes and on drying mudflats around vernal pools; with Mentha arvense, Scutellaria galericulata and Carex aquatilis; or with Downingia elegans and Ranunculus flammula; also, less abundantly, along open grassy stream banks.	
APOCYNACEAE			
Apocynum androsaemafolium L. Fremont, ID; T9N R44E SEC 3 SE ½; 5800'	common	Dry to semi-dry disturbed to stable open woods, roadsides and meadows with Pinus contorta, Populus tremuloides and Gilia aggregata.	Poisonous
ASTERACEAE			
Achillea millefolium L. Fremont, ID; T15N R44E SEC 16 SE 1/4; 8700'	abundant	Perhaps the most ubiquitous herb in the area. Moist to dry open woods, meadows and streambanks at all elevations; with Pinus contorta, Arnica cordifolia and Fragaria virginiana; or with Lupinus argenteus, Geranium viscosissimum and Castilleja miniata; or with Phacelia sericea, Pinus albicaulis and Sedum lanceolatum.	Medicinal value; roots usable as dye; indicator of disturbed areas.

Name	Status	Habitat Information	Known Economic Importance
Arctium lappa L. Fremont, ID; T9N R42E SEC 13 NW 1/4; 5200'	common	Moist disturbed areas along the Snake River lower elevations, with Malva neglecta, Urtica dioica and Glycyrrhiza lepidota.	Noxious weed; stems edible to humans.
Artemisia dracunculus L. Fremont, ID; T9N R42E SEC 11 SE 1/4; 5200'	common	Dry roadsides, with <u>Cirsium vulgare</u> , <u>Chenopodium album</u> , <u>Kochia scoparia</u> , and <u>Helianthus annuus</u> .	Flavoring (tarragon).
Artemisia ludoviciana Nutt. Gallatin, MT; T14S R5E SEC 18 SE ½; 6800'	common	Roadsides, and dry streambanks, with Salix spp., Pinus contorta and Poaceae spp.	
Artemisia tridentata Nutt. Fremont, ID; T13N R44E SEC 5 NE 2; 6400'	abundant	Dry flats and hillsides of ten with poor soil development and exposed bedrock; with Poaceae spp., Polygonum douglasii, Cryptantha torreyana, and Eriogonum heracleoides.	Important winter forage value for wildlife.
Artemisia tripartita Rydb. Fremont, ID; T9N R42E SEC 14 NE 4; 5200'	common	Sagebrush hills, with <u>Artemisia tridentata</u> , <u>Linum perenne, Chrysothamnus nauseosus</u> and <u>Lithospermum ruderale</u> .	Same as above.
Aster hesperius Gray Fremont, ID; T9N R42E SEC 14 NE ½; 5200'	rare	On edge of disturbed grassy riverbank in campground with <u>Melitotus alba</u> , <u>Carex spp.</u> , <u>Sium sauve</u> and <u>Arctium lappa</u> .	Scenic.
Aster perelegans Nels. & Macbr. Teton, WY; T47N R118W SEC 1 Sw ½; 6650'	common	Dry open woods and meadows; with Pseudotsuga menziesa, Ceanothus velutinus and Spiraea betulifolia; or with Bromus carinatus, Bromus commutatus and Chenopodium fremontii.	Scenic.
Balsamorhiza macrophylla Nutt. Fremont, ID; T10N R42E SEC 20 NE ½; 5700'		Bare open ground interspersed between stands of Acer grandidentatum; with . B. sagitatta, Purshia tridentata and Gerainium viscosissimum.	

Name	Status	Habitat Information	Known Economic Importance
Balsamorhiza sagittata (Pursh) Nutt. Gallatin, MT; T14S R4E SEC 22 NW 1/4; 7600'	common	Open, dry, rocky hillsides at all elevations with Symphoricarpos oreophilus, Lupinus argenteus and Festuca idahoensis; or with Phacelia sericea, Juncus confusus and Festuca idahoensis.	Forage value for game; roots edible to humans; seeds utilized by birds; scenic.
Centaurea maculosa Lam. Fremont, ID; T9N R42E SEC 14 SW ½; 5200'	uncommon	Disturbed margins of cultivated fields with Agropyron repens.	Noxious weed.
Chaenactis douglasii (Hook) H. & A. Fremont, ID; T10N R45E SEC 26 NW 4; 6200'	uncommon	Fine loose unstable scree above cliffs on north rim of Robinson Creek Canyon; in isolated clumps away from other vegetation.	
Chrysopsis villosa (Pursh) Nutt. Fremont, ID; T10N R42: SEC 30 NE 4; 5600'	uncommon	Dry thin soil in crevices of boulders (Southerly exposure); with <u>Pinus</u> <u>flexilis</u> , <u>Cirsium canovireus</u> , <u>Chaenactis douglasii</u> and <u>Eriogonum umbellatum</u> .	Scenic; heads eaten by deer.
Chrysothammus nauseosus (Pall.) Britt. Fremont, ID; T9N R42E SEC 13 NE 4; 5200'	common	Dry sagebrush flats and hillsides, with Artemisia tridentata, Artemisia tripartita Litho spermum ruderale and Linum perenne; or with Artemisia tridentata, Polygonum douglasii and Erigeron divergens.	Eaten by rabbits, otherwise, weedy.
Chrysothamnus viscidiflorus (Hook) Nutt. Fremont, ID; T9N R44E SEC 7 SW 4; 5400'	3 common	Same habitats as above.	Eaten by rabbits.
Cirsium arvense (L.) Scop. Fremont, ID; T9N R44E SEC 7 SW 4; 5300'	common	Dry to moist disturbed areas, mostly open on bare soil, but also persistent in grassy meadows and along shaded roadsides; with Cirsium vulgare, Lactuca serriola and Verbascum thapsus; or with Bromus carinatus, Potentilla biennis and Carex spp.; or with Oenothera biennis, Cynoglossum officinale and Verbena bracteata.	A persistent and noxious weed; seeds utilized by gold finches.

Name	Status	Habitat Information	Known Economic Importance
Cirsium canovirens (Rydb.) Petr. Fremont, ID; T10N R42E SEC 30 NE 4; 5600'	common	Dry thin soil in crevices of boulders on southerly exposures to open south facing scree slopes along canyons draining the Madison plateau; with Pinus flexilis, Chrysopsis villosa and Chacnactis douglasii; or with Phacelia hastata and Potentilla glandulosa.	Seeds eaten by finches; heads eaten by large herbivores.
Cirsium vulgare (Savi) Tenore Fremont, ID; T9N R42E SEC 13 NW 1/4; 5200'	common	Bare open disturbed areas and roadsides, with <u>Cirsium arvense</u> , <u>Lactuca sertiola</u> , and <u>verbasaum thapsus</u> ; or with <u>Chenopodium album</u> , <u>Kochia scoparia</u> and <u>Artemisia dracunculus</u> .	Noxious weed; seeds utilized and favored by Goldfinches,
Conyza canadensis (L.) Cronq. Fremont, ID; T9N R42E SEC 13 NE 4; 5250'	common	Open bare disturbed areas, with Machaeranthera canescens, Salsola kali and Cirsium vulgare.	Weed.
Erigeron divergens T. & G. Fremont, ID; T8N R45E SEC 16 SE 4; 6000'	common	Dry bare, often rocky hillsides to dry disturbed roadsides and waste areas; with <u>Viguiera multiflora</u> , <u>Rosa woodsii</u> , <u>Agastache urticifolia</u> and <u>Polygonum douglasii</u> .	
Eriophyllum lanatum (Pursh) Forbes Fremont, ID; T14N R44E SEC 20 SW ½; 6400'	common	Dry flats and hillsides, with Artemisia tridentata, Eriogonum heracleoides and Castilleja cusickii.	
Gnaphalium palustre Nutt. Fremont, ID; T10N R45E SEC 26 SE 1/4; 6500	common	Disturbed areas (mudflats) on lakeshores and stockpond margins and along streams; with Plagiobothrys scouleri, Carex lenticularis and Ranunculus flammula.	
Grindelia squarrosa (Pursh) Dunal	common	Dry bare roadsides and disturbed areas; with Medicago sativa, Cirsium arvense	Weed.

and Melilotus officinale.

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			Known
Name	Status	Habitat Information	Economic Importance
Helianthus annus L. Fremont, ID; T9N R42E SEC 11 SE 1/4; 5200	common	Dry roadsides, with Chenopodium album, Salsola kali and Artemisia dracunculus.	Seeds are edible to humans and highly favored by finches.
Helianthus nuttallii T. & G. Fremont, ID; T9N R42E SEC 14 SW 4; 5200'	uncommon	Marshy areas along Snake River with Typha latifolia and Scirpus acutus.	Same as above.
Iva xanthifolia Nutt. Fremont, ID; T9N R42E SEC 15 SE 1/4; 5200'	uncommon	Moist margins of cultivated fields, with Polygonum aviculare, Chenopodium album and Agropyron repens.	Noxious weed.
Lactuca pulchella (Pursh) DC. Teton, WY; T47N R118W SEC 1 SW 4; 6650'	common	Bare open areas in meadows and along streams and roadsides with <u>Tragopogon dubius</u> , <u>Perideridia gairdneri</u> and <u>Solidago missouriensis</u> .	Weed.
Lactuca serriola L. Fremont, ID; T9N R42E SEC 11 NE 1/4; 5250'	common	Bare disturbed overgrazed areas, with Cirsium arvense, Cirsium vulgare and Verbascum thapsus.	Weed.
Machaeranthera canescens (Pursh) Gray Fremont, ID; T13N R44E SEC 5 NE 4; 6400'	common	Dry bare areas in sagebrush meadows, with Artemisia tridentata, Chrysothamnus nauseosus and Lupinus sericeus.	
Madia glomerata Hook. Teton, WY; T47N R118W SEC 16 SW 1; 6550'	common	Disturbed, dry to moist meadows, clearcuts and roadsides; with Gentiana amarella, Rumex crispus and Poaceae spp.	Weed.
Matricaria matricarioides (Less.) Porter Fremont, ID; T14N R44E SEC 20 SW 4; 6400'	common	Roadsides and waste areas on hard bare ground; with Lepidium virginicum, Capsella bursa-pastoris and Spergularia rubra; wide spread.	Weed.

			Known
Name	Status	Habitat Information	Economic Importance
Taraxacum officinale Weber Fremont, ID; T15N R44E SEC 21 NE 4; 8500'	common	Moist disturbed areas, with <u>Spergularia</u> rubra and <u>Polygonum</u> aviculare.	Noxious weed.
Tragopogon dubius Scop. Teton, WY; T47N R118W SEC 1 SW ½; 6650'	common	Disturbed to bare open meadows and roadsides; with <u>Perideridia gairdneri</u> , <u>Stipa occidentalis and Aster integrifolius</u> .	Weed.
Viguiera multiflora (Nutt.) Blake Fremont, ID; T9N R42E SEC 14 SW ½; 5150'	common	Dry, bare areas on road banks and hill-sides, with Artemisia tridentata, Helianthus nutallii, and Urtica dioica.	
BETULACEAE			
Alnus incana (L.) Moench Teton, WY; T47N R118W SEC 1 SW ½; 6550' BORAGINACEAE	common	Stable, often rocky stream and river banks; with Lonicera involucrata, Betula glandulosa, and Carex spp.; usually associated with faster-moving streams.	Riverbank stabili- zation; buds are eaten by grouse.
Amsinckia retrorsa Suksd. Fremont, ID; T9N R42E SEC 13 NW ½; 5200'	common	Disturbed ground on rocky outcroppings along the Snake River; with Artemisia tridentata, Lappula redowskii, and Microsteris gracilis.	
Cynoglossum officinale (L.) Fremont, ID; T9N R44E SEC 7 SW 4; 5300'	rare	Dry, disturbed hillside near campground; with Chrysothamnus viscidiflorus, Amelanchier alnifolia, Cirsium arvense, and Cirsium vulgare; found in only one location.	Poisonous; weed.
Hackelia deflexa (Wahlenb.) Opiz Fremont, ID; T9N R42E SEC 11 NE 4; 5200'	common	Disturbed streambank; with Scrophularia lanceolata, Hackelia floribunda, Carex spp., and Salix spp.;	

			Known
Name	Status	Habitat Information	Economic Importance
Hackelia floribunda (Lehm.) Johnst. Fremont, ID; T10N R43E SEC 13 SW ½; 5700'	uncommon	Moist streambanks and adjacent road- sides; with Salix spp., Agastache urticifolia, and Castilleja miniata.	Scenic.
Hackelia patens (Nutt.) Johnst. Fremont, ID; T9N R42E SEC 11 NE 1/4; 5500'	unknown	Dry rocky areas on west facing side of Willow Creek Canyon with Heuchera parviflora, Arenaria conjesta, Ribes aureum, and Bromus carinatus.	Scenic.
Lappula redowskii (Nornem.) Greene Fremont, ID; T9N R42E SEC 13 NW 4; 5200'	common	Disturbed ground on rocky outcroppings along the Snake River; with Artemisia tridentata, Amsinckia retrorsa, and Microsteris gracilis.	Weed.
Lithospermum arvense L. Fremont, ID; T9N R42E SEC 13 NW 4; 5200'	unknown	Low, wet, more or less disturbed ground along Snake River; with Cirsium arvense, Lithophragma bulbifera, and Verbascum thapsus.	Weed.
Lithospermum ruderale (Dougl.) Fremont, ID; T9N R42E SEC 11 SW ½; 5200'	common	Dry sagebrush hills with Artemisia tridentata, Chrysothamnus viscidiflorus, and Linum perenne; in areas of moderate to heavy grazing or trampling.	Infusion of her- baceous parts used as birth control by In- dians.
BRASSICACEAE			
Brassica campestris L. Fremont, ID; T9N R42E SEC 14 NE 1/4; 5200'	common	Margins of cultivated fields; with Polygonum convoyulus, Lychnis alba and Agropyron repens.	Weed.
Camelina microcarpa Andrz. Teton, WY; T47N R118W SEC 1 SE 1/4; 6600'	common	Roadside disturbed areas; with <u>Capsella</u> bursa-pastoris, <u>Lepidium</u> virginicum, and <u>Thlaspi arvense</u> .	

			Vnorm
Name	Status	Habitat Information	Known Economic Importance
Capsella bursa-pastoris (L.) Medic. Fremont, ID; T10N R43E SEC 17 NE 4; 5800'	common to abundant	Disturbed areas, roadsides, streambanks, margins of stock ponds, lake shores, etc.; with Lepidium virginicum, Rorippa curvisiliand Spergularia rubra.	Edible weed.
Lepidium virginicum (L.) Fremont, ID; T10N R42E SEC 15 NE 4; 6200'	abundant	Almost any kind of hard bare ground, with Spergularia rubra, Capsella bursapastoris, and Rorippa curvisiliqua.	Weed.
Rorippa nasturtium- aquaticum (L.) Schinz & Thell. Fremont, ID; T9N R44E SEC 3 SE 1/4; 5500'	common	Riparian areas in two forms; with dissected leaves and thick, stiff stems, in cold, usually silted, streams; with Glyceria grandis, Cicuta douglasii, and Salix spp.; and with less dissected leaves and slender flexible stems in shady back waters and marshy depressions near streams with Eleocharis acicularis, Streptophus	
Sisymbrium altissimum (L.) Fremont, ID; T9N R42E SEC 11 SE 4; 5200'	common	amplexicaulis, and Veronica americana. Roadsides and bare areas; with Chenopodium album, Kochia scoparia, Helianthus annus, and Cirsium vulgare.	Seeds edible.
Thlaspi arvense L. Teton, WY; T47N R118W SEC 1 SE 4; 6500'	common	Roadside disturbed areas; with <u>Capsella</u> <u>bursa-pastoris</u> , <u>Camelina</u> <u>microcarpa</u> , and <u>Lepidium</u> <u>virginicum</u> .	
CACTACEAE			
Opuntia polyacantha Haw. Fremont, ID; T9N R 42E SEC 14 NE ½; 5200'	common	Dry, thin soil on Basalt outcroppings along the Snake River; with Thalictrum dasycarpum, Alnus incana, and poaceae spp.	Scenic.
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			Known
Name	Status	Habitat Information	Economic Importance
CAPRIFOLIACEAE			
Symphoricarpos albus (L.) Blake Fremont, ID; T13N R43E SEC 27 NW 4; 6400'	common	Mostly in open south facing slopes, usually under douglas fir, above the Snake River Plains, but scattered in suitable sunny habitats throughout the area to about 6500'; with Pseudotsuga menziesii, Populus tremuloides, and S. oreophilus;	Fruits eaten by grouse (important for them in fall and winter); poisonous for humans; important habitat type indicator species.
		or with S. orcophilus, Cirsium arvense, and Rosa woodsii.	
CAMPANULACEAE			
Downingia elegans (Dougl.) Torr. Teton, WY; T47N R118W SEC 2 NW 4; 6500'	uncommon	Drying mud flats around vernal pools; with Sium suave, Ranunculus aquatilis, and Ranunculus flammula.	Scenic.
CARYOPHYLLACEAE			
Cerastium arvense L. Fremont, ID; T8N R44E SEC 21 NE 1/4; 6000'	unknown	Disturbed (grazed) areas along Conant Creek; with Antennaria luzuloides, Artemisia tridentata, Eriogonum heracleoides, and Agoseris glauca.	Weed.
Cerastium vulgatum L. Fremont, ID; T13N R44E SEC 34 NW ½; 6500'	uncommon	Moist open disturbed areas, roadsides, and edges of stock ponds; with Rorippa curvisiliqua, and Spergularia rubra.	Weed.
Lychnis alba Mill. Fremont, ID; T8N R45E SEC 6 NW 1/2; 5900'	common	Disturbed roadsides, and edges of cultivated fields; with Verbascum thapsus, Agropyron repens, and Plantago major.	Scenic.

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Name	Status	Habitat Information	Known Economic Importance
Spergularia rubra (L.) Presl Fremont, ID; T11N R42E SEC 7 NE½; 6350'	abundant	Disturbed areas, roadsides, lake shores, and margins of stockponds; with <u>Rorippa curvisiliqua</u> , <u>Lepidium virginicum</u> , and <u>Polygonum aviculare</u> .	Disturbed area erosion control.
CHENOPODIACEAE			
Chenopodium album L. Fremont, ID; T9N R42E SEC 11 SE 4; 5200'	common	Roadsides and other more or less disturbed areas; with Artemisia dracunculus, Chenopodium fremontii, and Kochia scoparia.	Edible weed; seeds utilized by birds; also valuable early forage for wildlife and domestic stock.
Chenopodium fremontii Wats. Fremont, ID; T10N R43E SEC 17 NE 4; 5850'	common	Roadsides and other more or less disturbed areas; with Artemisia dracunculus, Chenopodium album, and Kochia scoparia.	Same as above.
Kochia scoparia (L.)Schrad. Fremont, ID; T9N R42E SEC 1 SE 4' 5200'	common	Dry roadsides; with Chenopodium album, Artemisia dracunculus, Helianthus annuus, and Salsola kali.	Weed; seeds utilized by birds.
Salsola kali L. Fremont, ID; T9N R42E SEC 11 SE 4; 5200'	common	Dry roadsides; with Chenopodium album, Kochia scoparia, Artemisia dracunculus, and Helianthus annuus.	Noxious weed; eaten by rabbits; seeds utilized by song birds
CUPRESSACEAE			
Juniperus scopulorum Sarg. Fremont, ID; T8N R45E SEC 6 NW 1/4; 5900'	common	Dry hillsides and open woods at the margins of forests; with Artemisia tridentata, Chrysothamnus nauseosus, and Prunus virginiana.	Winter forage value for big game; berries are eaten by many birds including Grosbeaks, Waxwings, etc.

Name	Status	Habitat Information	Known Economic Importance
CYPERACEAE			
Carex athrostachya Olney Fremont, ID; T9N R42E SEC 12 SW 1/4; 5200'	unknown	Moist meadow with Bromus carinatus, Cirsium arvense, and Potentilla biennis.	Seeds edible to humans, important ingredient in wild hay; excellent graze; important spring food for many animals; and extremely important erosion control & soil builder.
Carex stipata Muhl. Fremont, ID; T9N R42E SEC 11 NE 4; 5200'	unknown	Open area in water at edge of Willow Creek; with <u>Glyceria grandis</u> , <u>Juncus ensifolius</u> , <u>Rorippa nasturtium-aquaticum</u> , and <u>Salix spp</u> .	Same as above.
Scirpus acutus Muhl. Fremont, ID; T9N R42E SEC 14 SW 1/4; 5170'	common	Marshes along Snake River on northern edge of Snake River Plain; with Typha latifolia and Helianthus nuttallii.	Important muskrat and beaver food; utilized by Indians for numerous purposes, including mats, clothes, and boats; important habitat for nesting waterfowl.
EŬPHORBIACEAE			
Euphorbia esula L. Fremont, ID; T9N R42E SEC 11 NE 4; 5500'	common	Sunny to shady disturbed areas with Pseudotsuga menzicsii, Galium triflorum, and Poa pratensis.	Noxious weeds.
FABACEAE			
Glycyrrhiza lepidota Pursh. Fremont, ID; T9N R42E SEC 2 SE 4; 5200'	common	Disturbed moist areas along the Snake River; with Arctium lappa, Urtica dioica, and Melilotus alba.	Weed; maintains soil stability in disturb- ed areas; roots can be eaten raw or used as

eaten raw or used as flavoring (licorice).

		•	Known
Name	Status	Habitat Information	Economic Importance
Lupinus sericeus Pursh Fremont, ID; T14N R44E SEC 20 NW 4; 6400'	common	Dry meadows and roadsides; with Artemisia tridentata, Eriophyllum lanatum, Eriogonum heracleoides, and Castilleja longispica.	Same as above.
Medicago sativa L. Fremont, ID; T9N R42E SEC 11 SE 坛; 5200'	common	Roadsides and waste areas; with <u>Grindelia</u> squarrosa, <u>Cirsium arvense</u> , and <u>Melilotus</u> officinalis.	Important ground cover, seeds are important for small birds, including doves; seeds edible for humans. (Escaped cultivar with considerable economic importance.)
Melilotus alba Desr. Fremont, ID; T9N R42E SEC 13 NW 1/4; 5200'	common	Disturbed roadsides, riverbanks, and waste areas; with Arctium lappa, Carex spp., Urtica dioica, and Malva neglecta.	Same as above (not a cultivated species).
Melilotus officinalis (L.) Lam. Fremont, ID; T11N R45E SEC 9 SW 1/4; 7200'	common	Roadsides; with <u>Kochia scoparia</u> , <u>Helianthus annuus</u> , and <u>Salsola kali</u> ; or with <u>Trifolium repens</u> , <u>Trifolium dubium</u> , and <u>Tanacetum vulgare</u> .	Same as above.
Trifolium pratense L. Fremont, ID; T8N R45E SEC 11 SW ½; 6200'	common	Moist meadows and roadsides; with Agrostis alba, Delphinium burkei, and Cirsium scariosum.	Same as Medicago sativa (escaped cultivar with considerable economic importance).
Trifolium repens L. Fremont, ID; T14N R44E SEC 20 SW 1/4; 6400	common	Moist meadows, roadsides and disturbed areas; with <u>Trifolium pratense</u> , <u>Potentilla gracilis</u> , <u>Poaceae</u> spp., and <u>Lepidium virginicum</u> .	Important soil builder and food for most animals.

Name FUMARIACEAE	Status	Habitat Information	Known Economic Importance
Dicentra uniflora Kell. Fremont, ID; T9N R42E SEC 12 SE 1/4; 5500'	very common	Bare, wet ground often below melting snowbanks or on recently snowfree ground; with Fritillaria pudica, Nemophila breviflora and Artemisia tridentata.	Scenic; poisonous to livestock.
GROSSULARIACEAE	,		
Ribes aureum Pursh Fremont, ID; T10N R43E SEC 17 NE 4; 5900'	common	Riverbanks, often in rocky areas; with Heuchera parviflora, Cornus stolonifera, and Amelanchier alnifolia; or with Salix spp., Prunus virginiana, and Lychnis alba (Willow Creek canyon).	Berries abundant & important for wild life; berries edible for humans.
Ribes cereum Dougl. Fremont, ID; T10N R42E SEC 20 NE 4; 5700'	uncommon	Dry roadsides in ecotone between Snake River Plain and Forest; with Acer grandidentatum, Pseudotsuga menziesii, Juniperus scopulorum and Balsamorhiza macrophylla.	Same as above.
HALORGIDACEAE			
Myriophyllum spicatum L. Teton, WY; T47N R118W SEC 16 SW ½; 6500'	common	Shallow standing water in lakes; with Potamogeton spp., Lemna minor, Sparganium emersum, and Nuphar polysepalum.	Important waterfowl food and moose browse.
HIPPURIDACEAE			
Hippuris vulgaris L. Fremont, ID; T13N R43E SEC 14 SW 4; 6300'	common	In duck pond and below its dam at Elk Creek Ranch; with Glyceria grandis, Ranunculus aquatilis, and Myriophyllum spicatum.	Same as above also edible for humans.
HYDROPHYLLACEAE	grap ina production and the second of the se		₩
Hydrophyllum capitatum Dougl. Fremont, ID; T9N R42E SEC 12 NE 4; 5500'	common	Moist open shade; with <u>Pseudotsuga</u> menziesii, <u>Populustremuloides</u> , <u>Symphoricarpos albus</u> , and <u>Prunus</u> virginiana.	Scenic; very important early food source for mammals edible for humans.

Name	Status	Habitat Information	Known Economic Importance
Nemophila breviflora Gray Fremont, ID; T9N R42E SEC 13 NW 4; 5200'	very common	Widespread on moist bare disturbed ground; with Artemisia tridentata, Collinsia parviflora, and Delphinium nuttallianum.	Binds soil in disturbed areas.
JUNCACEAE			
Juncus ensifolius Wikst. Fremont, ID; T14N R44E SEC 20 SW 1/4; 6400'	common	Moist to wet depressions, lake edges and streambanks in open to lightly shaded locations; with Carex lanuginosa, Carex aquatilis, and Angelica arguta; or with Carex stipata, Glyceria grandis, and Rorippa nasturtium-aquaticum.	The following applies generally to important for streambank stabilization; important ingredient in wild hay; important early graze for livestock and wild lifestock and wild lifestock and these respects but less abundant and slightly less palata-
			ble.
Juncus tenuis Willd. Fremont, ID; T9N R42E SEC 11 NE 12; 5200'	uncommon	Streambanks along badly eroded banks of Willow Creek; with <u>Juncus ensifolius</u> , <u>Carex bebbii</u> , <u>Ribes aureum</u> , and <u>Salix spp.</u> ; found only in one location but possibly more common than indicated.	Same as above.
LAMIACEAE			
Agastache urticifolia (Benth.) Kuntze Fremont, ID; T14N R44E SEC 29 NW 4; 6400'	common	Dry rocky hillsides to moist roadsides and waste areas; with Rosa woodsii, Viguiera multiflora, and Juncus confusus; or with Hackelia floribunda, Lepidium virginicum, Matricaria matricarioides, and Salix spp.	Scenic.
Mentha arvensis L. Teton, WY; T47N R118W SEC 16 SW 1/4; 6500'	common	Open grassy lake edges; with <u>Scutellaria</u> galericulata, <u>Carex</u> aquatilis, and <u>Sium</u> suave.	Tea and jelly can be made from leaves and flowers.

Name	Status	Habitat Information	Known Economic Importance
Prunella vulgaris L. Fremont, ID; T14N R44E SEC 18 SE ½; 6400'	common	Moist open to bare areas in meadows, often near streams and lakes; with Campanula rotundifolia, Carex muricata, and Rorippa nasturtium-aquaticum.	Tea can be made from herbaceous parts; once considered to be of medicinal value.
LEMNACEAE			
Lemna minor L. Teton, WY; T47N R118W SEC 16 SW ½; 6500'	common	Shallow standing water in lakes, pools and along streams; with Spirodela polyrhiza, Utricularia vulgaris, and Myriophyllum spicatum.	Utilized by waterfowl; harvested and used in other countries for livestock food.
Lemna trisulca L. Teton, WY; T47N R118W SEC 14 NW 1/4; 6500'	common	Floating or submerged in shallow streams; with Salix spp., Carex spp., and Ranunculus aquatilis.	Same as above.
Spirodela polyrhiza (L.) Schleid. Teton, WY; T47N R118W SEC 16 SW ½; 6500'	common	Shallow standing water in lakes and pools and along streams; with Lemna minor, Utricularia vulgaris, and Myriophyllum spicatum.	Same as above.
LENTIBULARIACEAE			
Utricularia vulgaris L. Teton, WY; T47N R118W SEC 16 SW 1/4; 6500'	common	Shallow water among reeds at edges of lakes; with Lemna minor, Spirodela polyrhiza, and Carex aquatilis.	Scenic.

Name	Status	Habitat Information	Known Economic Importance
LILIACEAE			
Brodiaea douglasii Wats. Fremont, ID; T10N R42E SEC 14 NW 4; 6200'	common	Dry to moist open meadows, usually among sparse vegetation; with Agropyron caninum, Festuca idahoensis, and Delphinium nuttallianum.	Bulbs edible for humans; scenic.
Camassia quamash (Pursh) Greene Fremont, ID; T10N R43E SEC 17 NE ½; 5800'	common	Moist open riverbanks and meadows; with Allium geyeri, Valeriana occidentalis, and Lepidium virginicum.	Important food source for Indians; scenic.
Fritillaria pudica (Pursh) Spreng. Fremont, ID; T9N R42E SEC 13 SE 4; 5200'	common	Bare open disturbed ground; with Nemophila breviflora, Dicentra uniflora, and Lithophragma bulbifera.	Scenic; eaten by wild game; edible for humans
LINACEAE			
Linum perenne L. Fremont, ID; T9N R44E SEC 7 NW 1/2; 5300'	common	Dry sagebrush areas and roadsides at lower elevations; with Chrysothamnus nauseosus, Artemisia tridentata, and Lithospermum ruderale.	Seeds are edible after roasting to remove cyanide; stems provide useful fibers (closely related to cultivated flax). Very scenic.
MALVACEAE	•		
Malva neglecta Wallr. Fremont, ID; T9N R42E SEC 13 NW 4; 5200'	common	Moist, often bare, disturbed areas; with Arctium lappa, Oenothera biennis, and Urtica dioica.	Weed; edible for humans.

Name	Status	Habitat Information	Known Economic Importance
NYMPHAEACEAE			·
Nuphar polysepalum Engelm. Teton, WY; T47N R118W SEC 16 SW 4; 6500'	abundant	Covering large areas of lakes throughout area; with, but in deeper water than, Potamogeton alpinum, Potamogeton natans, and Myriophyllum spicatum.	Roots and seeds utilized as food by Indians; provides good fish habitat in some areas; provides cover for waterfowl.
ONAGRACEAE	•		•
Epilobium paniculatum Nutt. Fremont, ID; T9N R44E SEC 7 SW 1/4; 5300'	common	Dry roadsides; with <u>Helianthus</u> annuus, <u>Chenopodium</u> album, and <u>Salsola kali</u> .	Weed; minor browse value.
Gayophytum diffusum T. & G. Teton, WY; T47N R118W SEC 1; SW 4; 6550'	abundant	Clearcuts, roadsides and waste areas to sagebrush flats; with Solidago missouriensis, Bromus tectorum, and Madia glomerata; or with Artemisia tridentata, Polygonum douglasii, and Cryptantha torreyana.	
Oenethera biennis L. Fremont, ID; T9N R42E SEC 13 NW 1/4; 5200'	common	Roadsides and disturbed areas; with Cynoglossum officinale, Cirsium vulgare, and Verbena bracteata; or with Arctium lappa, Urtica dioica, and Malva neglecta.	Good grazing value for livestock and wild game. Scenic; sometimes cultivated ornamentally.
ORCHIDACEAE			
Habenaria hyperborea	uncommon l	Marshy bank of Willow Creek under	Scenic.

anagallis-aquatica.

willows; with Mimulus moschatus,

Ranunculus macounii, and Veronica

(L.) R. Br.

Fremont, ID; T9N R42E SEC 11 NE ½; 5500'

			Known
Name	Status	Habitat Information	Economic Importance
PLANTAGINACEAE			
Plantago major L. Fremont, ID; T8N R45E SEC 6 NW 坛; 5950'	common	Roadsides and waste areas, with Lepidium virginicum, Verbascum thaspsus, and Trifolium repens.	Weed; edible for humans.
POACEAE			
Agropyron caninum (L.) Beauv. Fremont, ID; T11N R45E SEC 9 SW 4; 7200'	common to abundant	Widespread; roadsides, meadows, clear- cuts and sagebrush flats; with Agrostis scabra, Solidago nana, and Carex douglasii; or with Poa palustris, Geranium viscosissimum, and Helianthella uniflora; or with Artemisia tridentata, Festuca idahoensis, and Chrysothamnus viscidiflorus.	The following information applies generally to grasses: High value for live stock grazing; elk forage; spring deer forage; excellent erosion control and soil builder; seeds are an important food source for numerous small game and birds.
Agropyron cristatum (L.) Gaertn. Fremont, ID; T8N R45E SEC 6 NW ½; 5900'	common	Dry meadows, wood margins, and road-sides; with Agropyron caninum, Verbascum thapsus, and Dactylis glomerata.	Same as above (widely introduced by federal agencies).
Agropyron dasystachyum (Hook.) Scribn. Fremont, ID; T9N R44E SEC 4 SE ½; 5600'	unknown	In moist streambank meadow under scattered pines; with Pinus contorta, Elymus glaucus, Poa nevadensis, Calamagrostis neglecta, Bromus carinatus, and Deschampsia elongata; found in only one location.	Same as above.
Agropyron repens (L.) Beauv. Fremont, ID; T8N R45E SEC 6 NW 4; 5900'	common	Disturbed areas and roadsides; with Agropyron cristatum, Dactylis glomerata, and Stipa occidentalis.	Same as above (but a noxious weed).

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Name	<u>Status</u>	Habitat Information	Economic Importance
Agropyron spicatum (Pursh) Scribn. & Smith Gallatin, MT; T14S R5E SEC 19 NE 1/4; 68001	common	Dry to moist meadows, open hillsides and sagebrush flats; with <u>Crepis acuminata</u> ; or with <u>Festuca idahoensis</u> , <u>Besseya wyomingensis</u> , <u>Phacelia sericea</u> , and <u>Artemisia tridentata</u> .	Same as above.
Agrostis scabra Willd. Fremont, ID; TllN R45E SEC 9 SW 4; 7200'	common to abundant	Clearcuts, roadsides, and bare open areas in meadows and along streams; with Solidago nana, Agropyron caninum, Agrostis humilis, and Melilotus officina; or with Gayophytum diffusum, Anaphalis margaritacea, and Lupinus argenteus.	Same as above,
Agrostis tenuis Sibth. Fremont, ID; T13N R43E SEC 14 SN %; 6290'	common	Roadsides, clearcuts and bare areas along streams; with Aster occidentalis, Salix spp., and Carex spp.; or with Bromus carinatus, Solidago canadensis, and Bromus tectorum.	Same as above.
Alopecurus aequalis Sobol. Fremont, ID; T11N R42E SEC 7 NW ½; 6400'	common	Moist to wet areas at margins of lakes, streams and stockponds. Two forms: decumbent and nodally rooting form growing in shallow water; tufted form growing on banks above water; with Glyceria borealis, Sagittaria cuneata, and Utricular vulgaris; or with Oenothera tanacetifolia, Rorippa curvisiliqua, and Spergularia rubra.	Same as above.
Bromus carinatus Hook. and Arn. Fremont, ID; T14N R44E SEC 20 SE 4; 6400	abundant	Widespread; meadows, roadsides, open streambanks and woods; often forming dense sods in favorable habitats; with Festuca idahoensis, Stipa occidentalis, Agropyron spp., and Senecio integerrimus; or with Solidago missouriensis, Aster integrifolius and Bromus tectorum.	

Name	Status	Habitat Information	Known Economic Information
Bromus commutatus Schrad. Fremont, ID; T9N R42E SEC 11 NE ½; 5200'	common	Dry heavily grazed or otherwise disturbed areas at lower elevations; with Lactuca serriola, Prunus virginiana, Bromus carinatus, and Cirsium arvense.	Same as above (minor).
Bromus tectorum L. Teton, WY; T47N R118W SEC 1 SW 4; 6550'	common	Disturbed areas along roads, streambanks and dry meadows; not particularly common above the Snake River Plain, possibly reflecting the generally good condition of meadow habitats within the National	which it becomes harm ful to grazing live-
		Forest; with Artemisia tridentata, Chrysothamnus nauseosus, and Linum perenne; or with Madia glomerata, Bromus carinatus, and Solidago missouriensis.	stock; indicator of over-used range.
Dactylis glomerata L. Fremont, ID; T8N R45E SEC 6 NW 4; 5900'	common	Moist open woods and meadows; with Stipa occidentalis, Pinus contorta, and Elymus glaucus.	Same as above.
Elymus cinereus Scribn. & Merrill Fremont, ID; T9N R42E SEC 13 NW 4; 6400'	common	In large clumps in dry, often disturbed areas; with <u>Grindelia squarrosa</u> , <u>Urtica dioica</u> , and <u>Cirsium vulgare</u> .	Same as above.
Festuca idahoensis Elmer Fremont, ID; T14N R44E SEC 20 SW 4; 6400'	abundant	Widespread in dry to moist meadows and along roadsides at all elevations; with Poa pratensis, Stipa occidentalis, and Helianthella uniflora; or with Artemisia tridentata, Bromus carinatus, and Linum perenne; or with Artemisia	Same as above (major).
		tridentata, Phacelia sericea, and Pinus albicaulis.	

Name	Status	Habitat Information	Known Economic Importance
Festuca subulata Trin. Fremont, ID; T9N R42E SEC 11 NE 1/4; 5200'	common	Moist open woods and scrubby areas; with Acer glabrum, Acer grandidentatum, and Pseudotsuga menziesii; or with Pseudotsuga menziesii, Rosa woodsii, and Aster conspicuus.	Same as above.
Glyceria elata (Nash) Jones Fremont, ID; T9N R42E SEC 11 NE 1/4; 5200'	unknown	Shallow water at edge of Willow Creek; with Glyceria grandis, Rorippa nasturtium-aquaticum, and Juncus ensifolius; found only at one location.	Same as above.
Glyceria grandis Wats. Fremont, ID; T9N R44E SEC 3 SE 4; 5500'	common	Standing to flowing water in and along streams; with Rorippa nasturtium—aquaticum, Galium trifidum, and Urtica dioica; or with Carex stipata, Juncus tenuis, and Juncus ensifolius.	Same as above.
Hordeum jubatum L. Fremont, ID; T8N R45E SEC 6 NW 4; 5900'	common	Dry roadsides at lower elevations; with Plantago major, Verbascum thapsus, and Linaria vulgaris.	Same as above.
Phleum pratense L. Fremont, ID; T14N R44E SEC 20 SW ½; 6400	common	Moist open woods and meadows; with Festuca idahoensis, Melica spectabilis, and Potentilla gracilis.	Same as above.
Poa palustris L. Fremont, ID; T8N R45E SEC 6 NW 4; 5900†	common	Clearcuts, meadows and roadsides, to adjacent open woods; with Agrostis exarata, Arnica cordifolia, and Phleum pratense.	Same as above.
Poa pratensis L. Fremont, ID; T14N R44E SEC 20 SW 1/4; 6400'	common to abundant	Widespread; moist meadows, clearcuts and clearings to sagebrush flats; with Stipa occidentalis, Festuca idahoensis, and Geranium viscosissimum; or with Artemisia tridentata, Artemisia arbuscula, and Machaeranthera canescens.	Same as above.

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Name	Status	Habitat Information	Economic Importance
Sitanion hystrix (Nutt.) Smith Fremont, ID; T11N R45E SEC 9 SW 4; 7200'	unknown	Margins of subalpine meadow along S. Partridge Creek; with <u>Calamagrostis</u> canadensis, <u>Pinus contorta</u> , and <u>Trisetum wolfii</u> ; found in only one location, but probably common.	Same as above.
Stipa comata Trin. & Rupr. Fremont, ID; T10N R42E SEC 20 SW 4; 5600'	common	Dry brush communities south of the National forest boundary along the Snake River; with Symphoricarpos oreophilus, Artemisia tridentata, llieracium cynoglossoides and Koeleria cristata.	Same as above.
POLEMONIACEAE			
Gilia aggregata (Pursh) Spreng. Fremont, ID; T9N R42E SEC 1 SW 1/4; 5400'	common	Bare dry hillsides and roadbanks, alone or with Apocynum androsaemafolium, Artemisia tridentata, and Bromus carinatus.	Scenic; some forage value.
Microsteris gracilis (Hook.) Greene Fremont, ID; T9N R42E SEC 13 NW 4; 5200'	common	Open ground usually with sagebrush; with Collinsia parviflora, Artemisia tridentata, Nemophila breviflora, and Delphinium nuttallianum.	
Phlox longifolia Nutt. Fremont, ID; T8N R44E SEC 21 NE 4; 6000'	common	Open south facing brushy hillsides; with Symphoricarpos oreophilus, Purshia tridentata, Artemisia tridentata, Comandra umbellata, and Lupinus sericeus.	Very scenic.

	•		Known
Name	Status	Habitat Information	Economic Importance
Phlox multiflora A. Nels. Fremont, ID; T15N R44E SEC 16 SE ½; 8700'	common	Dry sagefrush flats and hillsides; also scattered in dry subalpine streambeds; with Artemisia tridentata, Chrysothamnus nauscosus, and Poaceae spp.; or with Phacelia sericea, Eriogonum umbellatum,	Scenic; soil binder.
		and Sedum lanceolatum; or with Pinus contorta, Dodecatheon pulchellum, and Aster alpigenus.	
POLYGONACEAE			
Eriogonum umbellatum Tor Fremont, ID; T15N R44E SEC 16 SE 坛; 8700'		Two forms: dwarf plants with compact head-like inflorescences at summit of Mt. Two Top; with Phacelia sericea, Pinus albicaulis, Penstemon procerus, and Artemisia tridentata; or more well-develope plants with open inflorescences in sagebrush flats; with Artemisia tridentata, Eriogonum heracleoides, Eriophyllum lanatum and Castilleja longispica.	
Fremont, ID; T9N R42E SEC 2 SE 4; 5200'	common	Floating in ponds at lower elevations; with Rumex salicifolius.	h Important water- fowl food.
	V. e.		
Polygonum aviculare L. Fremont, ID; T8N R45E SEC 6 NW ½; 5950'	common	Hard bare distubed areas; with <u>Plantago</u> major, <u>Lepidium virginicum</u> , and <u>Orthocarpus luteus</u> .	Heavily utilized by small birds.
Polygonum convovulus L. Fremont, ID; T9N R42E SEC 14 SW 4; 5150'	common	Among stubble in cultivated fields; with Lychnis alba and Brassica campestris.	Noxious weed.
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Name	Status	Habitat Information	Known Economic Importance
Polygonum douglasii Greene Fremont, ID; T14N R44E SEC 20 SW 坛; 6400'	common to abundant	Bare areas in moist to dry meadows and clearcuts, and along roads; with Collomia linearis, Cryptantha torreyana, and Gayophytum diffusum.	An important portion of the diet of sage grouse & other birds, as well as for big game & domestic livestock.
Rumex acetosella L. Fremont, ID; T12N R43E SEC 1 SW ½; 6300'	common	Dry bare roadsides; with Artemisia tridentata and Cryptantha torreyana.	Good in salads; browsed by game.
Rumex crispus L. Teton, WY; T47N R118W SEC 16 SW 1/4; 6500'	common	Moist open areas usually near water; with Carex aquatilis, Mentha arvensis, and Madia glomerata.	Good salad/pot herb. Browsed by large mammals.
Rumex salicifolius Weinm. Gallatin, MT; T14S R5E SEC 18 SE 4; 6800'	uncommon	Margins of ponds and streams in open areas; with <u>Carex raynoldsii</u> , <u>Stellaria longipes</u> , and <u>Anemone nuttalliana</u> ; or with <u>Polygonum natans</u> .	Good in salads; provides some forage.
POLYPODIACEAE			
Pteridium aquilinum (L.) Kuhn. Fremont, ID; T9N R42E SEC 11 NE ½; 5200'	common	Shaded to open hillsides — usually associated with springs; with <u>Prunus</u> virginiana, <u>Ribes aureum</u> , and <u>Conyza canadensis</u> ; or with <u>Pseudotsuga menziesii</u> , <u>Rubus parviflorus</u> , and <u>Sorbus scopulina</u> .	Young fiddleheads edible for humans.
POTAMOGETONACEAE			
Potamogeton natans L. Teton, WY; T47N R118W SEC 16 SW 坛; 6500'	common	Shallow lakes; with Potamogeton spp., Myriophyllum spicatum, Nuphar polysepalum, Utricularia vulgaris, Lemna minor, Spirodela polyrhiza, Sparganium emersum, and Sagittaria cuneata.	Important waterfowl forage; a basic producer for the aquatic food web.

•			Known
Name	Status	Habitat Information	Economic Importance
RANUNCULACEAE			
Ranunculus glaberrimus Hook. Fremont, ID; T12N R41E SEC 11 SW 4; 6400'	common	Sagebrush flats; with Artemisia tridentata, Lithophragma bulbifera, Mertensia oblongifolia, and Claytonia lanccolata.	Scenic.
Ranunculus jovis A. Nels Fremont, ID; T10N R42E SEC 24 NE 4; 6200'	common	Recently snowfree ground in sagebrush areas; with Artemisia tridentata, Poaceae spp. and Eriogonum spp.	Scenic.
Ranunculus macounii Britt. Fremont, ID; T9N R42E SEC 11 NE 4; 5500'	unknown	Marshy bank of Willow Creek under willows; with <u>Mimulus moschatus</u> , <u>Mimulus gutattus</u> , and <u>Veronica anagalis - aquatica</u> .	
Thalictrum dasycarpum Fisch. & Ave-Lall. Fremont, ID; T9N R42E SEC 14 SW 4; 5200'	rare	Along bank of Snake River; with Alnus incana, Salix exigua, and Lychnis alba; found in only one location.	Scenic.
ROSACEAE			
Crataegus douglasii Lindl. Fremont, ID; T9N R45E SEC 16 SW 4; 5800'	common	Along streams and in adjacent meadows and sagebrush uplands; with Alnus incana, Amelanchier alnifolia, and Rhamnus alnifolia; or with Artemisia tridentata, Linum perenne and Chrysothamnus nauseosus.	Berries utilized by birds & many native animals, including deer; porcupines utilize bark; important nesting habitat.
Potentilla biennis Greene Fremont, ID; T9N R42E SEC 12 SW 坛; 5200'	common	Moist disturbed meadows, lakeshores, and roadsides; with Bromus carinatus, Carex athrostachya, and Cirsium arvense.	Some forage value.
Prunus virginiana L. Fremont, ID; T10N R43E SEC 8 SE 4; 6000'	common	Widespread; moist open woods and on dry open canyon sides above streams; with Pinus contorta, Populus tremuloides, and Sorbus scopulina; or with Artemisia tridentata, Rosa woodsii, and Amelanchier alnifolia.	Fruit eaten & processed by man; food for birds, coyotes & other mammals. Spring shoots toxic to domestic stock.
	•	HALLE OLLO	to domestra secons

Name	Status	Habitat Information	Known Economic Importance
Rosa nutkana Presl Fremont, ID; T9N R44E SEC 4 SE 4; 5600'	uncommon	Moist open meadow; with <u>Symphoricarpos</u> oreophilus and <u>Bromus carinatus</u> ; found only at one location.	Hips make excellent tea when dried & boiled; can also be eaten raw; high in Vitamin C.
Rosa woodsii Lindl. Fremont, ID; T8N R45E SEC 16 SE ½; 6150'	common	Dry hillsides and roadbanks and in clearings; with Agastache urticifolia, Gilia aggregata, and Viguiera multiflora; or with Pseudotsuga menziesii, Aster conspicuus, and Habenaria unalaskensis.	Same as above.
RUBIACEAE			
Galium aparine Fremont, ID; T9N R42E SEC 11 NE 1/4; 5200'	unknown	Maple scrub above Willow Creek; with Pseudotsuga menziesii, Acer glabrum, Acer grandidentatum, and Festuca subulata; found only at one location, but probably more common.	Can be used for tea; some forage; excellent for stuffing mattresses,
SALICACEAE			
Populus trichocarpa T & G Fremont, ID; T13N R44E SEC 29 SE 次; 6400'	common	Along streams and as saplings along moist roadsides; with Populus tremuloides, Alnus incana, and Betula glandulosa.	Large game cover & browse; beaver use; important winter food (buds) for grouse.
Salix exigua Nutt. Fremont, ID; T9N R42E SEC 14 SW 1/4; 5200'	common	In dense standa along banks of Snake River; with Alnus incana, Scirpus acutus, and Typha latifolis.	Cover & browse for big game & birds during all seasons.
Salix spp.	abundant	Scattered clumps to dense thickets along streams and springs; closely associated with beaver activity.	

Name	Status	Habitat Information	Known Economic Importance
SAXIFRAGACEAE	e e e e e e e e e e e e e e e e e e e	· · · · · · · · · · · · · · · · · · ·	
Lithophragma bulbifera Rydb. Fremont, ID; T12N R41E SEC 11 SW 1/4; 6400'	common	Bare often disturbed ground in sagebrush communities; with Fritillaria pudica, Claytonia lanceolata, Collinsia parviflora, and Hesperochrion pumilis.	Scenic; bulbs eaten by game birds.
SCROPHULARIACEAE			
Linaria vulgaris Hill Fremont, ID; T8N R45E SEC 5 NE 14; 6000'	common	Roadsides and disturbed open woods; with <u>Verbascum thapsus</u> , <u>Hordeum jubatum</u> and <u>Agropyron cristatum</u> .	Very scenic.
Mimulus guttatus D.C. Fremont, ID; T14N R44E SEC 16 NE 4; 6420'	common	Along streambanks and around springs with Mimulus lewisii, Carex hoodii and Trifolium longipes; or with Gentiana detonsa, Aster chilensis and Carex luzulina; also occasional in moist clearcuts.	Very scenic; some browse value.
Mimulus moschatus Dougl. Fremont, ID; T9N R42E SEC 11 NE 坛; 5500'	unknown	Marshy bank of Willow Creek under willows; with Ranunculus macounii, Mimulus gutattus, and Veronica anagallis - aquatica.	Scenic.
Penstemon deustus Dougl. Fremont, ID; T10N R43E SEC 17 NE ½; 5800'	common	Open rocky outcroppings; with Allium brevistylum, Solidago nana, and Arenaria congesta.	Scenic.
Scrophularia lanceolata Pursh Fremont, ID; T11N R42E SEC 7 NW 4; 6400'	common	Disturbed rocky areas in moist woods and associated with willows along Willow Creek canyon; with Erigeron acris, Rubus idaeus, Viola adunca and Pseudotsuga menziesii; or with Salix spp., Hackelia micrantha and Stellaria vulgaris.	
Verbascum thapsus L. Fremont, ID; T8N R45E SEC 6 NW 4; 5935'	common	Disturbed areas, with Lychnis alba, Castilleja miniata and Plantago major; or with Cirsium vulgare, Lactuca serriola, and Bromus commutatus.	Numerous small birds utilize seeds during critical winter period because these protrude

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above the snow.

Name	Status	Habitat Information	Economic Importance
Veronica americana Schwein. Fremont, ID; T14N R44E SEC 18 SW 1/4; 6400'	common	Wet areas on streambanks and along edges of marshy depressions and springs; with Rorippa nasturtium—aquaticum, Mertensia ciliata and Salix spp.	Can be eaten by man; utilized by streamside foragers of all sizes.
Veronica serpyllifolia L. Fremont, ID: T12N R41E SEC 13 SE 4; 6400'	common	Disturbed areas near water and along roadsides; with Trifolium repens, Trifolium longipes and Rorippa curvisiliqua.	Streamside forage.
SOLANACEAE			
Hyoscyamus niger L. Fremont, ID; T9N R44E SEC 7 SW ½; 5300'	common .	Areas in warm river campground; with Agropyron repens, Cirsium arvense, Cirsium vulgare, and Verbena bracteata; found only at one location.	Poisonous to most animals.
SPARGANIACEAE			
Sparganium emersum Rehmann Teton, WY; T47N R118W SEC 4 SW 1/4; 6400'	common	Edges of shallow lakes; with Sagittaria cuneata, Myriophyllum spicatum and Carex aquatilis.	Roots utilized by man and aquatic mammals; leaves browsed by moose.
ТУРНАСЕЛЕ	•		
Typha latifolia L. Fremont, ID; T9N R45E SEC 35 SW 1; 6450'	common	Edges of shallow lakes and along Snake River at lower elevations; with Nuphar polysepalum and Potamogeton spp.; or with Alnus incana, Scirpus acutus, and Helianthus nuttallii.	Valuable plant for aquatic mammals and waterfowl for shelter, nesting, cover and food; could be utilized by man for food as all parts are edible.

Known

URTICACEAE			
Urtica dioica L. Fremont, ID; T9N R42E SEC 13 NW 4; 5200'	common	Moist, often disturbed areas usually near streams or rivers; with Glycyrrhiza lepidota, Arctium lappa, and Oenothera biennis; or with Picca engelmannii, Alnus incana and Crataegus douglasii.	Disturbing plant because of stinging hairs; makes a good potherb when young if boiled properly.

Habitat Information

Status

Known

Economic Importance

VERBENACEAE

Name

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Verbena bracteata Lag.	common	Roadside disturbed areas at Warm	Small birds utilize seeds
& Rodr.		River campground; with Hyoscyamus	
Fremont, ID; T9N R44E		niger, Cirsium arvense and Machaeranthera	
SEC 7 SW 14; 5300'		canescens.	

VIOLACEAE

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Viola nuttallii Pursh Fremont, ID; T9N R42E	very common	Widespread in open areas from sagebrush flats to meadows, open woods and clear-	Leaves and flowers edible for humans; scenic;
SEC 13 NW 4; 5200'		cuts; with Artemisia tridentata, Collinsia	important spring forage.
		parviflora, and Fritillaria pudica; or	
•		with Pinus contorta, Gerainium	•
	•	viscosissimum, and Luninus argentees: or	•

with Gayophytum diffusum, Polygonum douglasii, and Arnica cordifolia.

Plant List for

ZONE 2: DOUGLAS FIR,

SPRUCE - FIR ZONE

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			Known
Name	Status	Habitat Information	Economic Importance
ACERACEAE			
Acer glabrum Torr. Fremont, ID; T9N R42E SEC 13 NW 4; 5250'	common	Stable shaded canyon sides along the Snake River Plains; with <u>Pseudotsuga</u> menziesii and <u>Acer grandidentatum</u> ; or rocky outcroppings on dry sagebrush hillsides with <u>Populus</u> tremuloides, <u>Prunus virginiana</u> , and <u>Rosa woodsii</u> .	Firewood, game cover.
Acer grandidentatum Nutt. Fremont, ID; T9N R42E SEC 11 NE 1/4; 5300'	common	Stable shaded canyon sides along Snake River Plains; with <u>Pseudotsuga menziesii</u> and <u>Acer glabrum</u> .	Same as above.
ALISMATACEAE			
Alisma plantago-aquatica L. Teton, WY; T47N R118W SEC 16 SW 1/4; 6520'	common	Shallow standing water at edges of lakes; with <u>Carex aquatilis</u> , <u>Glyceria</u> grandis , and <u>Sagittaria cuneata</u> .	Roots are edible.
Sagittaria cuneata Sheld. Teton, WY; T47N R118W SEC 4 SW 1/4; 6400'	common	Shallow standing water at edges of lakes; with Alisma plantago-aquatica, Glyceria borealis, Carex aquatilis.	Roots are edible.
APIACEAE			
Angelica arguta Nutt. Fremont, ID; T14N R44E SEC 20 SW 4; 6400'	common	Wet areas adjacent to marshes and stream- banks; with Alopecurus alpinus, Danthonia californica, and Juncus ensifolius.	
Cicuta douglasii (DC.) Coult. and Rose Fremont, ID; T9N R44E SEC 3 SE 1/4; 5500'	common	Open streambanks often in disturbed areas; with Actea rubra, Urtica dioica, and Rubus idaeus; or with Rorippa nasturtium-aquaticum, Glyceria grandis, Carex stipata, and Salix spp.	

Name	Status	Habitat Information	Known Economic Importance
Heracleum lanatum Michx. Teton, WY; T47N R118W SEC 1 SW 4; 6650'	common	Open to shaded streambanks and wet areas; with Populus trichocarpa, Alnus incana, Delphinium occidentale, and Allium brevistylum; or with Picea engelmannii, Elymus glauca, and Caltha leptosepala.	Stems edible for humans; important sheep and big game browse.
Ligusticum filicinum Wats. Teton, WY; T47N R118W SEC 4 SW ½; 6400'	common	Moist woods to open hillsides; with Pinus contorta, Helianthella quinquenervis and Epilobium angustifolium; or with Sedum lanceolatum, Festuca idahoensis, and Rumex paucifolia.	•
Lomatium ambiguum (Nutt.) Coult. & Rose Fremont, ID; T10N R42E SEC 13 NW4; 6150'	common	Bare rocky areas in clearcuts, and dry to moist meadows; with Microsteris gracilis, Purshia tridentata, and Achillea millefoli	
Lomatium dissectum (Nutt.) Math. & Const. Fremont, ID; T10N R43E SEC 8 SE 4; 6000'	common	Open moist woods often in rocky areas; with <u>Populus tremuloides</u> , <u>Berberis repens</u> , and <u>Senecio integerrimus</u> .	Same as above.
Lomatium triternatum (Pursh) Coult. & Rose Fremont, ID; T14N R44E SEC 20 SW 4; 6400	common	Dry roadside along sagebrush flat; with Lupinus sericeus, Agoseris glauca and, Eriophyllum lanatum;	Same as above.
Orogenia linearifolia Wats. Fremont, ID: T9N R42E SEC 12 SE 4; 5500'	unknown	Moist bare recently snow free ground; with Artemisia tridentata, Dicentra uniflora and Fritillaria pudica.	Minimal amount of early browse; edible for humans.
Osmorhiza occidentalis (Nutt Fremont, ID; T11N R42E SEC 7 NW 1/2; 6400'		Moist to wet shady meadows with <u>Populus</u> tremuloides, <u>Geranium richardsonii</u> , <u>Castilleja miniata</u> , and <u>Carex</u> spp.	Seeds usable as flavorings.

Name	Status	Habitat Information	Known Economic Importance
Osmorhiza chilensis H&A Teton, Wy; T47N R118W SEC 1 SE %; 6550'	common	Widespread in dry to moist woods, with Populus trichocarpa, Galium triflorum, and Pyrola secunda; or with Pinus contorta, Antennaria microphylla, and Vaccinium scoparium.	Same as above.
Perideridia gairdneri (H.&A.) Math. Teton, WY; T47N R118W SEC 1 SW ½; 6650'	common	Dry to moist open to bare areas in woods and meadows to 8500° on Mt. TwoTop; with Pseudotsuga menziesii, Ceanothus velutinus, and Spiraea betulifolia; or with Ligusticum filicinum and Festuca idahoensis.	Roots eaten by Indians and possibly by wildlife also.
Sanicula marilandica L. Teton, WY; T48N R118W SEC 16 NE 1/4; 6000'	unknown	Wet marshy open woodlands and streambanks; with Geum macrophyllum, Elymus glaucus and Picea engelmannli.	
Sium suave Walt. Teton, WY; T47N R118W SEC16 SW 4; 6500'	common	Abundant at edges of lakes and on drying mudflats around vernal pools; with Mentha arvense, Scutellaria galericulata, and Carex aquatilis; or with Downingia elegans and Ranunculus flammula; also, less abundantly, along open grassy streambanks.	
APOCYNACEAE	•		
Apocynum androsaemafolium L. Fremont, ID; T9N R44E SEC 3 SE 1/4; 5800'	common	Dry to semi-dry disturbed to stable open woods, roadsides and meadows; with Pinus contorta, Populus tremuloides, and Gilia aggregata.	Poisonous.

Name	Status	Habitat Information	Known Economic Importance
ASTERACEAE	en Mariano de la Maria Maria de la grapa de apparente en la composição de		
Achillea millefolium L. Fremont, ID; T15N R44E SEC 16 SE 4; 8700'	abundant	Perhaps the most ubiquitous herb in the area. Moist to dry open woods, meadows, and streambanks at all elevations; with Pinus contorta, Arnica cordifolia, and Fragaria virginiana; or with Lupinus argenteus, Geranium viscosissimum, and Castilleja miniata; or with Phacelia sericea, Pinus albicaulis, and Sedum lanceolatum.	Medicinal value; roots usable as dye; indicator of disturbed areas.
Agoseris aurantiaca (Hook.) Greene Gallatin, MT; T14S R4E SEC 22 NW ½; 7500'	common	More or less disturbed ground in clearcuts to barer parts of moist meadows with Poa reflexa, Arnica parryi, Agoseris glauca, and Epilobium spp.	Seeds favored by goldfinches.
Agoseris glauca (Pursh) Raf. Fremont, ID; T14N R44E SEC 20 SE 4; 6400	common	Drier clearcuts to sagebrush meadows to summit of Mt. Two Top, usually on bare soil; with Agoseris aurantiaca, Arnica parryi, Hieracium albiflorum, and Epilobium spp.; or with Artemisia tridentata, and Eriogonum umbellatum.	Same as above.
Anaphalis margaritacea (L.) B. & H. Fremont, ID; T14N R44E SEC 23 SW 1/4; 6550	common	Clearcuts and wooded roadsides, with Symphoricarpos oreophilus, Gayophytum diffusum, and Lupinus argenteus.	Scenic.
Antennaria corymbosa E. Nels. Fremont, ID; T15N R44E SEC 21 NE ½; 8000'	common	Open moist meadows and steam bottoms, often at higher elevations; with <u>Potentilla diversifolia</u> , <u>Poaceae</u> spp., and <u>Geum triflorum</u> .	
Antennaria luzuloides T & G Fremont, ID; T8N R44E SEC 21 NE 1/2; 6000'	common	Open dry often rocky areas; with Cerastium arvense, Brodiaea douglasii, Nemophila breviflora and Artemisia tridentata.	

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Name	Status	Habitat Information	Economic Importance
Antennaria microphylla Rydb. Fremont, ID; T10N R43E SEC 8 SE ½; 6000'	abundant	Open woods to rocky sagebrush meadows; with Arnica cordifolia, Pinus contorta, and Carex geyeri.	Scenic.
Antennaria racemosa Hook. Fremont, ID; T12N R42E SEC 31 SW ½; 7200'	common	Dry depauperate pine woods; with Pinus contorta, Arnica cordifolia, Calamagrostis rubescens and Vaccinium globulare.	
Antennaria umbrinella Rydb. Fremont, ID; T15N R44E SEC 16 SE 4; 8700'	common	Open woods to rocky sagebrush meadows at lower elevations, to rocky exposed summit of Mt. Two Top; with Antennaria microphylla, Poaceae spp., and Potentilla gracilis; or with Erigeron compositus, Penstemon procerus, and Phacelia sericea.	
Arnica chamissonis Less. Fremont, ID; T13N R43E SEC 14 SE 4; 6400'	common	Moist open cleacuts to marshy ground to shallow water; with Gayophytum diffusum, Calochortus nuttallii and Polygonum douglasii or with Carex lanuginosa, Veronica scutellata and Juncus lougistylis, or with Eleocharis palustris, Utricularia vulgaris, and Carex rostrata.	
Arnica cordifolia Hook. Fremont, ID; T10N R43E SEC 8 SE 4; 6050'	abundant	Dry (depauperate) to moist woodlands and clearcuts; with Pinus contorta, Carex geyeri, and Fragaria virginiana.	Scenic.
Arnica diversifolia Greene Fremont, ID; T12N R45E SEC 5 NW 4; 7000'	uncommon	Shady areas in open woods on south facing canyon sides; I found it only along the east west running canyons on the Eastern side of the study area; with Abies lasciocarpa, Vaccinium scoparium, V. globulare and Lonicera utahensis.	

Name	Status	Habitat Information	Known Economic Importance
Arnica latifolia Bong. Fremont, ID; T15N R44E SEC 21 NE 4; 7900'	common	Dry open woods at higher elevations; with Picea englemannii, and Pedicularis racemosa.	
Arnica parryi Gray Gallatin, MT; T14S R4E SEC 23 NE ½; 7600'	common	Moist woodlands and adjacent clearcuts; with <u>Pseudotsuga menziesii</u> , <u>Abies lasciocarpa</u> , <u>Elymus glacus</u> , and <u>Ranunculus orthorhynchus</u> .	Medicinal.
Artemisia ludoviciana Nutt Gallatin, MT; T14S R5E SEC 18 SE ½; 6800'	. common	Roadsides and dry streambanks; with Salix spp., Pinus contorta, and Poaceae spp.	
Artemisia arbuscula Nutt. Fremont, ID; T13N R44E SEC 4 NW ½; 6400'	uncommon	Bare rocky sagebrush flats, with Artemisia tridentata, Machaeranthera canescens, and Lupinus sericeus.	Winter forage value for wildlife.
Artemisia tridentata Nutt. Fremont, ID; T13N R44E SEC 5 NE 1/4; 6400'	abundant	Dry flats and hillsides, often with poor soil development and exposed bedrock; with Poaceae spp., Polygonum douglasii, Cryptantha torreyana, and Eriogonum heracleoides.	Same as above but more important.
Artemisia tripartita Rydb. Fremont, ID; T9N R42E SEC 14 NE 1/4; 5200'	common	Sagebrush hills, with Artemisia tridentata, Linum perenne, Chrysothamnus nauscosus, and Lithospermum ruderale.	Same as above.
Aster alpigenus (T&G) Gray Fremont, ID; T12N R452 SEC 23 SW 4; 7800'	rare	Dry streambed (in sand) at higher elevation with Pinus contorta and Phlox multiflora; not found on Mt. Two Top; only one clump was found.	s; Scenic.

	a. .		Known
Name	Status	Habitat Information	Economic Importance
Aster chilensis Nees. Fremont, ID; T14N R44E SEC 23 SW 1/4; 6600'	unknown	Growing in marshy soil in spring; with <u>Carex luzulina</u> , <u>Gentiana detonsa</u> , and <u>Mimulus guttatus</u> .	Scenic.
Aster conspicuus Lindl. Fremont, ID; T13N R43E SEC 2 SE 4; 6800'	common	Moist woods and adjacent clearcuts and roadsides; with <u>Pseudotsuga menziesii</u> .	Scenic.
Aster engelmannii (Eat.) Gray Fremont, ID; T10N R45E SEC 26 SW 4; 6550	common	Moist woods, wooded roadsides and meadows; with <u>Hieracium cynoglossoides</u> , <u>Pinus contorta</u> , and <u>Aster occidentalis</u> .	Scenic.
Aster foliaceus Lindl. Fremont, ID; T15N R44E SEC 15 SW ½; 8500'	common	Moist woods and adjacent meadows and streambanks; with <u>Picea engelmannii</u> , <u>Sambucus cerulea</u> , and <u>Elymus glaucus</u> .	Scenic.
Aster integrifolius Nutt. Fremont, ID; T11N R45E SEC 9 SW 4; 7200'	common	Widespread in bare areas in moist open meadows at mid to upper elevations; with Agrostis scabra, Solidago nana, and Danthonia intermedia.	Scenic.
Aster occidentalis (Nutt.) T & G Fremont, ID; T13N R43E SEC 14 SW 1/4; 6300') unknown	Moist roadside above marshy area along Elk Creek; with <u>Spergularia rubra</u> , <u>Agrostis tenuis</u> , and <u>Salix</u> spp.	Scenic.
Aster perelegans Nels. & Macbr. Teton, WY T47N R118W SEC 1 SW 4; 6650'	common	Dry open woods and meadows; with Pseudotsuga menziesii, Ceanothus velutinus, and Spiraea betulifolia; or with Bromus carinatus, Bromus commutatus, and Chenopodium fremontii.	Scenic.
Nutt. Fremont, ID; T10N R42E SEC 20 NE ½; 5700'	uncommon	Bare open ground interspersed between stands of Acer grandidentatum; with B. sagitatta, Purshia tridentata and Gerainium viscosissimum.	

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Name	Status	Habitat Information	Economic Importance
Balsamorhiza sagittata (Pursh) Nutt. Gallatin, MT; T145 R4E SEC 22 NW 4; 7600'	common	Open, dry, rocky hillsides at all elevations; with Symphoricarpos oreophilus, Lupinus argenteus, and Festuca idahoensis; or with Phacelia sericea, Juneus confusus, and Festuca idahoensis.	Forage value for game; roots edible for humans; seeds utilized by birds; scenic.
Bidens cernua L. Fremont, ID; T13N R43E SEC 14 SW 1/4; 6300'	uncommon	Wet disturbed banks of lakes and streams (collected only near Elk Creek Ranch); with Glyceria grandis, Salix spp., Mimulus guttatus, and Carex aquatilis	Weed.
Chaenactis douglasii (Hook.) H & A Fremont, ID; T10N R45E SEC 26 NW 4; 6200'	uncommon	Fine loose unstable scree above cliffs on north rim of Robinson Creek canyon; in isolated clumps away from other vegetation; found only on this site.	
Chrysanthemum <u>leucanthemum</u> L. Fremont, ID; T11N R42E SEC 1 NW 坛; 6400'	uncommon	In open pine woods; I have found it only in this one location near the Osborne bridge; it is abundant where it is; with Pinus contorta, Calamagrostis rubesceus, and Poa pratensis.	Scenic.
Chrysopsis villosa (Pursh) Nutt. Fremont, ID; T10N R42E SEC 30 NE ½; 5600'	uncommon	Dry thin soil in crevices of boulders (Southerly exposure); with Pinus flexilis, Cirsium canovireus, Chaenactis douglasii and Eriogonum umbellatum.	Scenic; heads eaten by deer.
Chrysothamnus nauseous (Pall.) Britt. Fremont, ID; T9N R42E SEC 13 NE 4; 5200'	common	Dry sagebrush flats and hillsides; with Artemisia tridentata, Artemisia tripartita, Lithospermum ruderale, and Linum perenne; or with Artemisia tridentata, Polygonum douglasii, and Erigeron divergen	Eaten by rabbits; otherwise weedy.
Chrysothamnus viscidiflor (Hook.) Nutt. Fremont, ID; T9N R44E SEC 7 SW 1/2; 5400'	us common	Same habitat as above species.	Eaten by rabbits.

Name	Status	Habitat Information	Known Economic Importance
Cirsium arvense (L.) Scop. Fremont, ID; T9N R44E SEC 7 SW 4; 5300'	common	Dry to moist disturbed areas, mostly on open bare soil, but also persistent in grassy meadows and along shaded roadsides; with <u>Cursium vulgare</u> , <u>Lactuca serriola</u> , and <u>Verbascum thapsus</u> ; or with <u>Bromus carinatus</u> , <u>Potentilla biennis</u> , and <u>Carex spp.</u> ; or with <u>Oenothera biennis</u> Cynoglossum officinale, and <u>Verbena bracte</u>	<u>3</u> ,
Cirsium canovirens (Rydb.) Petr. Fremont, ID; T10N R42E SEC 30 NE 4; 5600'	common	Dry thin soil in crevices of boulders on southerly exposures to open south facing scree slopes along canyons draining the Madison plateau; with Pinus flexilis, Chrysopsis villosa and Chaenactis douglasii; or with Phacelia hastata and Potentilla glandulosa.	Seeds eaten by finches; heads eaten by large herbivores.
Cirsium scariosum Nutt. Fremont, ID; T8N R45E SEC11 SW 1/4; 6200'	common	Open moist to wet flats along streams; with Frasera speciosa, Delphinium burkei, Carex spp., and Castilleja cusickii; or with Valeriana edulis, Carex spp., and Allium schoenoprasum.	Seeds favored by goldfinches.
Cirsium vulgare (Savi) Tenore Fremont, ID; T9N R42E SEC 13 NW 4; 5200	common	Bare open disturbed areas and roadsides; with <u>Cirsium arvense</u> , <u>Lactuca serriola</u> , and <u>Verbascum thapsus</u> ; or with <u>Chenopodium album</u> , <u>Kochia scoparia</u> , and <u>Artemisia dracunculus</u> .	Noxious weed; seeds utilized and favored by goldfinches.
Conyza canadensis (L.) Cronq. Fremont, ID; T9N R42E SEC 13 NE4; 5250'	common	Open bare disturbed areas; with Machaeranthera canescens, Salsola kali, and Cirsium vulgare.	Weed.
Crepis acuminata Nutt. Gallatin, MT; T14S R5E SEC 19 NE 4; 6800	common	Dry mostly bare hillside above dry bed of Madison River; with Agropyron spicatum;	Some forage value for livestock and . wildlife.

Name	Status	Habitat Information	Economic Importance
Crepis runcinata (James) T & G Fremont, ID; T12N R43E SEC 29 NW 4; 6400'	unknown	Moist woods near bank of beaver ponds on Warm River; with <u>Senecio pauperculus</u> , <u>Pinus contorta</u> and <u>Vaccinium caespitosum</u> .	Same as above.
Erigeron acris L. Gallatin, MT; T14S R5E SEC 19 NE 4; 6800'	common	Usually restricted to boulder fields and rocky crevices in open to shaded locations in moist to dry woods; with Rubus idacus, Ribes lacustre, and Cystopteris fragilis.	
Erigeron compositus (Pursh) Fremont, ID; T15N R44E SEC 16 SE ½; 8650	uncommon	Primarily on rocks at summit of Mt. Two To but also found in dry microsites on lava outcroppings at lower elevations; wi Antennaria alpina, Phacelia sericea, and Penstemon procerus; or with Populus tremuloides, Rubus idaeus, and Woodsia scopulina.	
Erigeron divergens T & G Fremont, ID; T8N R45E SEC 16 SE 1/4; 6000	common	Dry bare, often rocky hillsides, to dry disturbed roadsides and waste areas; with Viguiera multiflora, Rosa woodsii, Agastache urticifolia, and Polygonum douglasii.	

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Name	Status	Habitat Information	Known Economic Importance
Erigeron glabellus Nutt. Fremont, ID; T14N R44E SEC 20 SW 4; 6400'	common	Open semi-dry sagebrush terraces above marshes along Henry's Lake Outlet; with Artemisia tridentata, Zygadenus venenosus, Agoseris glauca, and Eriogonum heracleoides.	Scenic.
Erigeron gracilis Rydb. Fremont, ID; T14N R44E SEC 20 SW ½; 6400'	common	In similar to moister habitats than E. glabellus; with Helianthella uniflora, Poaceae spp., Geranium viscosissimum, and Lupinus argenteus.	
Erigeron speciosus (Lindl.) DC. Teton, WY; T47N R118W SEC 1 SW ½; 6550'	common	Open bare areas in meadows and on roadsides; with Symphoricarpos oreophilus, Perideridia gairdneri, and Poaceae spp.	Scenic.
Eriophyllum lanatum (Pursh) Forbes Fremont, ID; T14N R44E SEC 20 SW 4; 6400	common	Dry flats and hillsides, with Artemisia tridentata, Eriogonum heracleoides, and Castilleja cusickii.	
Gnaphalium palustre Nutt. Fremont, ID; T10N R45E SEC 26 SE 4; 6500	common	Disturbed areas (mudflats) on lake shores and stockpond margins and along streams; with Plagiobothrys scouleri, Carex lenticularis, and Ranunculus flammula.	
Gnaphalium viscosum H.B.K. Fremont, ID; T13N R43E SEC 2 SE 1/4; 6800	common	Clearcuts and moist woodland roadsides, with Gayophytum diffusum, Symphoicarpos oreophilus, and Pinus contorta.	
Helianthella quinquenervis (Hook.) Gray Teton, WY; T47N R118W SEC 4 SW ½; 6400'	common	Moist, open to shady areas near lakes and streams; with Epilobium angustifolium Ligusticum filicinum, and Pseudotsuga menziesii.	<u>.</u> ,

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Name	Status	Habitat Information	Known Economic Importance
Helianthella uniflora (Nutt.) T & G Fremont, ID; T14N R44E SEC 20 SW 4; 6400	common	Moist meadows and hillsides; with Geranium viscosissimum, Poa palustris, and Melica spectabilis.	
Hieracium albiflorum Hook. Gallatin, MT; T14S R4E SEC 22 NW 4; 7600	common	Moist open woods and adjacent clearcuts and meadows; with Agoseris aurantiaca, Poa reflexa, and Gayophytum diffusum.	
Hieracium cynoglossoides ArvTouv. Teton, WY; T47N R118W SEC 1 SW 4; 6550'	common	Moist woods and adjacent clearcuts and meadows; with <u>Gayophytum diffusum</u> , <u>Madia glomerata</u> , and <u>Salix spp</u> .	
Hieracium gracile Hook. Gallatin, MT; T14S R4E SEC 22 NW 4; 7600'	common	Moist woods and clearings, with <u>Picea</u> engelmannii, <u>Veronica wormskjoldii</u> , and <u>Geranium viscosissimum</u> .	
Lactuca pulchella (Pursh) DC. Teton, WY; T47N R118W SEC 1 SW 坛; 6650'	common	Bare open areas in meadows and along streams and roadsides; with <u>Tragopogon dubius</u> , <u>Perideridia gairdneri</u> , and <u>Solidago missouriensis</u> .	Weed.
Machaeranthera canescens (Pursh) Gray Fremont, ID; T13N R44E SEC 5 NE 4; 6400'	common	Dry bare areas in sagebrush meadows; with Artemisia tridentata, Chrysothamnus nauseosus, and Lupinus sericeus.	
Madia glomerata Hook. Teton, WY; T47N R118W SEC 16 SW 1/4; 6550'	common	Disturbed, dry to moist meadows, clearcuts and roadsides; with <u>Gentiana amarella</u> , <u>Rumex crispus</u> , and <u>Poaceae</u> spp.	Weed.
Matricaria maritima L. Fremont, ID; TllN R42E SEC 7 NE 4; 6400'	uncommon	Wood margins around meadows at Lyle Springs; with Pinus contorta, Stipa occidentalis, and Hackelia micrantha; found only at one location.	Weed.

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Name	Status	Habitat Information	Economic Importance
Matricaria matricarioides (Less.) Porter Fremont, ID; T14N R44E SEC 20 SW 1/4; 6400'	common	Roadsides and waste areas on hard bare ground; with Lepidium virginicum, Capsella bursa-pastoris, and Spergularia rubra; widespread.	Weed.
Ratibida columnifera (Nutt.) Woot. & Standl. Fremont, ID; T14N R43E SEC 25 NW 4; 6400	uncommon	Roadsides along Highway 191; with Tanacetum vulgare, Medicago lupulina, and Trifolium repens.	Scenic.
Rudbeckia occidentalis Nu Fremont, ID; T14N R44E SEC 16 NW 4; 6400'	tt. common	Moist open to shady areas usually near streams or marshes; with Mimulus guttatus, Mimulus lewesii, Populus tremuloides, and Valeriana occidentalis.	
Senecio crassulus Gray Fremont, ID; T15N R44E SEC 32 NW 4; 6540	common	Moist meadows and open woods; with Pseudotsuga menziesii, Geranium viscosissimum, and Poaceae spp.	
Senecio foetidus Howell Fremont, ID; T 8 N R45E SEC 11 S½ 6200'	common	Wet open meadows; with <u>Camassia</u> <u>quamash</u> , <u>Ranunculus acriformis</u> , <u>Carex</u> <u>microptera</u> , and <u>Sisyrinchium angustifolium</u> .	
Senecio hydrophilus Nutt. Teton, WY; T47N R118W SEC 2 NW 4; 6450 t	. uncommon	Moist to wet clearcuts, meadows and adjacent woods, usually near water; with Pinus contorta.	
Senecio integerrimus Nutt Fremont, ID; T10N R43E SEC 8 SE 14; 5850'	common.	Dry to moist open woods, meadows and roadsides; with Pinus contorta, Poa nervosa, and Arnica cordifolia.	

Name	Status	Habitat Information	Known Economic Importance
Senecio pauperculus Michx. Fremont, ID; T12N R SEC 29 NW 4; 6400'	unknown	Moist woods near bank of beaver pond on Warm River; with <u>Crepis runcinata</u> , <u>Pinus contorta</u> and <u>Vaccinium caespitosu</u> . This species is difficult to distinguis from <u>S. pseudaureus</u> Rydb. and <u>S. streptanthifolius</u> , which appears to be common and widespread of the three. <u>S. usually occurs on drier hillsides and</u>	m. h the most
Senecio pseudaureus Rydb. Teton, WY; T48N R118 SEC 16 NE ½; 6000'	unknown BW	open woods whereas the others prefer moister more shady habitats such as exi along streams. Streambanks along Falls River and Squirrel Creek; with Carex aquatilis, Juncus ensifolius and Spiranthes romanzoffiana. (See note on S. pauperculus).	st
Senecio serra Hook. Fremont, ID; T13N I SEC 27 NW 坛; 6280	common R43E	Open moist woods and adjacent meadows, with Stipa occidentalis, Pinus contort and Silene oregana.	
Senecio sphaerocephal Greene Fremont, ID; T13N R SEC 24 SW %; 6400'	·	Marshes; with <u>Pedicularis groenlandica</u> , <u>Juncus ensifolius</u> , <u>Carex simulata</u> and <u>Carex cusickii</u> .	
Senecio streptanthifol Greene Fremont, ID; T14N F SEC 11 SW ½; 7000		Bare embankment above road along steep wooded hillside; with Penstemon cyaneus; (See note on S. pauperculus).	

Name	Status	Habitat Information	Known Economic Importance
Senecio triangularis Hook. Fremont, ID; T14N R44E SEC 20 SW 14; 6400'	common	Wet marshy depressions, lake margins, and streambanks, often in dense stands; with Alopecurus alpinus, Angelica arguta, and Carex spp.; or with Mertensia ciliata, Mimulus guttatus, and Aconitum columbianum.	Streambank stabil- ization.
Solidago canadensis L. Teton, WY; T47N R118W SEC 1 SW 4; 6650'	common	Moist open woods and meadows, and along streams; with Bromus carinatus, Sagina saginoides, and Populus trichocarpa; or with Pinus contorta, Poaceae spp., and Geranium viscosissimum.	Scenic.
Nutt. Teton, WY; T47N R118W SEC 1 SW 4; 6550'	common	Open meadows and bare areas; with Aster intergrifolius, Melica spectabilis, and Gayophytum diffusum.	Scenic.
Solidago multiradiata Ait. Fremont, ID; T11N R45E SEC 9 SW 4; 7200'	uncommon to rare	Thin soil on boulders along dry creek beds in open woods; with Pinus contorta, Veronica wormskjoldii, Trisetum wolfii, and Trisetum spicatum; found only in one location.	
Solidago nana Nutt. Fremont, ID; T11N R45E SEC 9 SW 4; 7200'	common	Bare rocky areas along streambank meadows to rock crevices on cliffs and out-croppings; with Agrostis scabra, Carex douglasii, and Ivesia gordonii.	
Stephanomeria tenuifolia (Torr.) Hall Fremont, ID; T14N R44E SEC 23 SW ½; 7000'	rare	Cliff crevices of rock outcroppings high on sides of lower Black Canyon above Thirsty Creek; with Parietaria pensylvanica, Sagina saginoides, Sorbus scopulina, and Pseudotsuga menziesii; found only in one location.	

Name	Status	Habitat Information	Known Economic Importance
Tanacetum vulgare L. Fremont, ID; T14N R43E	uncommon	Roadsides along Highway 191; with Trifolium repens, Medicago lupulina, and	Weed.
SEC 35 SE 1/4; 6400' Taraxacum officinale	common	Poaceae spp. Moist disturbed areas, with Spergularia	Noxious weed.
Weber Fremont, ID; T15N R44E SEC 21 NE 坛; 8500'		rubra and Polygonum aviculare.	
Tragopogon dubius Scop. Teton, WY; T47N R118W SEC 1 SW 4; 6650'	common	Disturbed to bare open meadows and roadsides; with <u>Perideridia gairdneri</u> , <u>Stipa occidentalis</u> , and <u>Aster integrifolius</u>	Weed.
Viguiera multiflora (Nutt.) Blake Fremont, ID; T9N R42E SEC 14 SW ½; 5150'	common	Dry, bare areas on roadbanks and hillsides; with Artemisia tridentata, Helianthus nuttallii, and Urtica dioica.	
Wyethia amplexicaulis (DC.) Nutt. Fremont, ID; T11N R42E SEC 7 NW 4; 6400'	common	Moist to wet, level, open meadows; with Sisyrinchium angustifolium, Potentilla arguta, Alopecurus alpinus, and Carex spp.; area of collection subject to moderate grazing.	Scenic; weed (often appearing in response to grazing pressure).
Wyethia helianthoides Nutt Fremont, ID; T11N R42E SEC 7 NW 4; 6400'	. common	Same habitat, and usually appearing with, Wyethia amplexicaulis.	Same as above.
BERBERIDACEAE			
Berberis repens Lindl. Fremont, ID; T10N R43E SEC 8 SE 1/4; 6060'	common	Dry to moist open woods, clearcuts, and rocky embankments with <u>Populus</u> tremuloides, <u>Pinus contorta</u> , and <u>Symphoricarpos oreophilus</u> .	Berries are edible and are excellent grouse food.

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Name	<u>Status</u>	Habitat Information	Known Economic Importance
BETULACEAE			*
Alnus incana (L.) Moench Teton, WY; T47N R118W SEC 1 SW 4; 6550'	common	Stable, often rocky, stream and river banks; with Lonicera involucrata, Betula glandulosa, and Carex spp.; usually associated with faster moving streams.	Riverbank stabili- zation; buds are eaten by grouse.
Alnus sinuata (Regel.) Rydb. Fremont, ID; T14N R44E SEC 11 SE ½; 6800'	uncommon	Moist northfacing roadbanks; with Pinus contorta (seedlings), Vaccinium scoparium and Poaceae spp.	Same as above.
Betula glandulosa Michx. Fremont, ID; T12N R44E SEC 29 NW 坛; 6300'	common	Stable, often rocky, stream and river banks; with Alnus incana, Pinus contorta, and Carex spp.	Same as above.
BORAGINACEAE			
Fremont, ID; T9N R42E SEC 13 NW 1/4; 5200'	common	Disturbed ground on rocky outcroppings along the Snake River; with Artemisia tridentata, Lappula redowskii, and Microsteris gracilis.	
Cryptantha torreyana (Gray) Greene Fremont, ID; T14N R44E SEC 29 NW 4; 6400'	common	Bare areas in stable to unstable dry sage-brush flats; with Artemisia tridentata, Eriogonum heracleoides, and Polygonum douglasii; appears to increase with over-grazing.	
Hackelia floribunda (Lehm.) Johnst. Fremont, ID; T10N R43E SEC 13 SW 4; 5700	uncommon	Moist streambanks and adjacent roadsides; with <u>Salix spp.</u> , <u>Agastache urticifolia</u> , and <u>Castilleja miniata</u> .	Scenic.

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Hame	Status	Habitat Information	Economic Importance
Hackelia micrantha (Eastw.) J.L. Contry Fremont, ID; T11N R42E SEC 7 NE 4; 6380'	common	Moist open flat meadows often in local shade of pines or willows; with Pinus contorta, Poaceae spp., Wyethia amplexicaulis, Wyethia helianthoides, and Salix spp.; widespread.	Scenic.
Hackelia patens (Nutt.) Johnst. Fremont, ID; T9N R42E SEC 11 NE 坛; 5500'	unknown	Dry rocky areas on west facing side of Willow Creek Canyon with <u>Heuchera</u> parviflora, <u>Arenaria conjesta</u> , <u>Ribes aureum</u> , and <u>Bromus carinatus</u> .	Scenic.
Lappula redowskii (Hornem.) Greene Fremont, ID; T9N R42E SEC 13 NW ½; 5200'	common	Disturbed ground on rocky outcroppings along the Snake River; with Artemisia tridentata, Amsinckia retrorsa, and Microsteris gracilis.	Weed.
Lithospermum arvense L. Fremont, ID; T9N R42E SEC 13 NW ½; 5200'	unknown	Low, wet, more or less disturbed ground along Snake River; with <u>Cirsium arvense</u> , <u>Lithophragma bulbifera</u> , and <u>Verbascum</u> thapsus.	Weed.
Mertensia ciliata (Torr.) G.Don Fremont, ID; T14N R44E SEC 20 SW ½; 6400'	common	Cool, shady streambanks and wet areas; with <u>Hackelia micrantha</u> , <u>Castilleja minia</u> and <u>Salix</u> spp.	Streambank stabil- ta, ization; scenic.
Mertensia oblongifolia (Nutt.) G. Don Fremont, ID; T12N R41E SEC 11 SW 4; 6400'	common	Sagebrush flats and hillsides; with Artemisia tridentata, Hesperochiron pumilis, and Dodecatheon conjugens.	Scenic; browsed by game and by domestic livestock.

Name	Status	Habitat Information	Known Economic Importance
Plagiobothrys scouleri (H & A) Johnst. Fremont, ID; T10N R43E SEC 17 NE 4; 5820'	common	Open disturbed streambanks, lake shores and margins of stockponds; with Spergularia rubra, Gnaphalium palustre, and Veronica peregrina.	
BRASSICACEAE			
Arabis glabra (L.)Bernh. Gallatin, MT; 6800'	common	Bare open areas in clearcuts along roadsides and in dry riverbeds; with Rumex salicifolius, Aster foliaceus and carex spp.	Some forage value.
Arabis hirsuta (L.) Scop. Fremont, ID; T12N R45E SEC 23 SW 4; 7750'	common	Subalpine dry streambeds; with Aster alpigenus, Potentilla diversifolia and Phlox multiflora; probably in other habitats as well.	Some forage value.
Arabis holboellii Hornem. Fremont, ID; T12N R43E SEC 1 SW 4; 6300'	common	Bare, open, often disturbed sites through- out the study area; with Artemisia tridentata, Cryptantha torreyanna, and Collomia linearis.	Readily grazed by livestock and wildlife.
Arabis lemonii Wats. Fremont, ID; T15N R44E SEC 20 NW 4; 8600'	uncommon	Bare snowbank areas on north side of Mt. Two Top; with Oxyria digyna, Androsace septentrionalis and Lewesia pygmaea.	
Arabis sparsiflora Nutt. Fremont, ID; T15N R44E SEC 16 SE 1/4; 8700'	common	Open bare sites throughout the area; with Phacelia sericea, Sedum lanceolatum and Haplopappus acaulis.	Some forage value.

Name	Status	Habitat Information	Known Economic Importance
Barbarea orthoceras Ledeb. Fremont, ID; T10N R43E SEC 8 SE 4; 5800'	common	Moist stable to disturbed streambanks, open woods and roadsides (above streams); with Actea rubra, Arenaria conjesta, Heuchera parviflora; or with Populus tremuloides, Androsace filiformis, and Osmorhiza occidentalis.	
Camelina microcarpa Andrz. Teton, WY; T47N R118W SEC 1 SE 1/2; 6600'	common	Roadside disturbed areas; with Capsella bursa-pastoris, Lepidium virginicum, and Thlaspi arvense.	
Capsella bursa-pastoris (L.) Medic. Fremont, ID; T10N R43E SEC 17 NE 1; 5800'	common to abundant	Disturbed areas, roadsides, streambanks, margins of stockponds, lake shores, etc.; with Lepidium virginicum, Rorippa curvisiliqua, and Spergularia rubra.	Edible; weed.
Cardamine breweri Wats. Fremont, ID; T9N R44 SEC 3 SE ½; 5500'		Very shallow water and mud in shady quiet backwaters and wet depression areas near marshy streams, with Streptopus amplexicaulis, Carex spp. and Veronica americana.	Some forage value.
Descurainia pinnata (Watt.) Britt. Fremont, ID; T10N R42E SEC 20 NE 4; 5700'	common	South facing brushy roadsides and open woods; with Populus tremuloides, Pseudotsuga menziesii, Symphoricarpos oreophilus, and Gayophytum diffusum.	Weed; seeds eaten by birds.
Descurania richardsonii (Sweet) Schulz Fremont, ID; T14N R44E SEC 29 NW 4; 6400'	common	Moist open disturbed areas; with Matricaria matricarioides, Erysimum cheiranthoides, and Phacelia hastata.	Weed.

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Name	Status	Habitat Information	Economic Importance
Draba lanceolata Royle Fremont, ID; T13N R45E SEC 10 NE 1/4; 7500'	common	Rock crevices and ledges on south facing slopes of canyons draining the Madison Plateau; with Draba praealta, Potentilla glandulosa, Cystopteris fragilis and Heuchera parviflora.	
Draba praealta Greene Fremont, ID; T12N R45E SEC 4 NW 4; 7500'	common	Rock crevices and ledges on south facing slopes of canyons draining the Madison Plateau; with <u>Draba lanceolata</u> , <u>Potentilla glandulosa</u> , <u>Cystopteris fragilis</u> , <u>Heuchera parviflora</u> .	
Draba stenoloba Ledeb. Fremont, ID T11N R42E SEC 7 NN 4; 6400'	uncommon	Moist shady roadsides; with Pinus contorta, Agropyron caninum, Arenaria congesta, and Poa pratensis; or in moist shady meadows margins; with Pseudotsuga menziesii, Populus tremuloides, Androsace filiformis, and Osmorhiza occidentalis.	
Erysimum cheiranthoides L. Fremont, ID; T14N K44E SEC 29 NW 4; 6400'	uncommon	Disturbed roadsides, waste areas, etc.; with <u>Descurania richardsonii</u> , <u>Marticaria matricarioides</u> , and <u>Viguiera multiflora</u> .	•
Lepidium virginicum L. Fremont, ID; T10N R42E SEC 15 NE 4; 6200'	abundant	Almost any kind of hard, bare ground; with Spergularia rubra, Capsella bursa-pastoris, and Rorippa curvisiliqua.	Weed.
Rorippa curvisiliqua (Hook.) Bessey Fremont, ID; T12N R4TE SEC 13 SE 4; 6400'	common	Moist disturbed areas, roadsides, meadows, clearcuts, margins of stockponds, and lakeshores; with Veronica peregrina, Plagiobothrys scouleri, and Spergularia rubra.	Minor value as waterfowl food,
Rorippa nasturtium-aquati (L.) Schinz & Thell. Fremont, ID; T13N R43E SEC 27 NE ½; 6300'		Aquatic in streams; often associated with bank erosion and siltation; with Salix spp., Senecio integerrimus and Potentilla palustris.	Edible watercress.

Name	Status	Habitat Information	Known Economic Importance
Rorippa obtusa (Nutt.) Britt. Fremont, ID; T12N R42E SEC 17 NN 1/4; 6300'	common	Found only on lakeshore and drying mudflats of Island Park Reservoir near West End Campground; with Potentilla anserina; abundant in that habitat.	Minor value as waterfowl food.
Thlapsi arvense L. Teton, WY; T47N R118W SEC 1 SE 1/4; 6500'	common	Roadside disturbed areas; with <u>Capsella</u> bursa-pastoris, <u>Camelina microcarpa</u> , and <u>Lepidium virginicum</u> .	
CALLITRICHACEAE			
Callitriche verna L. Teton, WY; T47N R118W SEC 16 SW ½; 6520'	common	Shallow standing water in lakes and beaver ponds; with Alisma plantago-aquatica, Sagittaria cuneata, Sparganium emersum, and Lemna minor.	Possible value as waterfowl food.
CAMPANULACEAE			\$
Campanula rotundifolia L. Fremont, ID; T14N R44E SEC 17 NW 4; 6410	abundant	Dry to moist hillsides, meadows, clearcuts and open woods — one of the most common herbs in the area; with <u>Erigeron glabellus</u> <u>Carex muricata</u> , and <u>Festuca idahoensis</u> .	
Downingia elegans (Dougl.) Torr. Teton, WY' T47N R118W SEC 2 NW 4; 6500'	uncommon	Drying mudflats around vernal pools; with Sium suave, Ranunculus aquatilis, and Ranunculus flammula.	Scenic.
CAPRIFOLIACEAE			
Lonicera involucrata (Rich.) Banks Fremont, ID; T14N R4 ⁴ E SEC 19 NE 4; 6400'	common	Sunny to semi-shady edges of wet areas and along streams; with Pinus contorta, Pyrola asarifolia, and Mertensia ciliata; or with Alnus incana, Shepardia canadensis, and Populus trichocarpa.	Berries edible to birds; mildly toxic to humans.

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Name	<u>Status</u>	Habitat Information	Known Economic Importance
Lonicera utahensis Wats. Fremont, ID; T14N R44E SEC 23 SW 4; 6500'	uncommon	Moist stream bottoms in open woods; with Pseudotsuga menziesii, Pinus contorta, Athyrium felix-femina, and Vaccinium globulare; found only in one area but	Same as above.
		possibly more common than indicated.	
Sambucus racemosa Gray Teton, WY; T47N R118W SEC 1 SW 4; 6600'	common	Moist ground along streams, to cool, moist, wooded north facing slopes at medium elevations; with Picea engelmannii, Hydrophyllum capitatum, and Actaea rubra; or with Picea engelmannii, Abies lasciocarpa, and Vaccinium globulare.	Fruits important for birds and other wildlife; not edible for humans.
Symphoricarpos albus (L. Blake Fremont, ID; T13N R43E SEC 27 NW 4; 6400'		Mostly in open south facing slopes, usually under douglas fir, above the Snake River Plains, but scattered in suitable sunny habitats throughout the area to about 6500'; with Pseudotsuga menziesii, Populus tremuloides, and S. oreophilus;	Fruits eaten by grouse (important for them in fall and winter); poisonous for humans; important habitat type indicator species.
		or with <u>S. oreophilus</u> , <u>Cirsium arvense</u> , and <u>Rosa woodsii</u> .	
Symphoricarpos oreophilus Gray Fremont, ID; T10N R43E SEC 17 NE ½; 5820'	abundant	Dry to moist open woods to open meadows to subalpine ridges of Mt. Two Top, often in rocky areas; with Arenaria congesta, Heuchera parvifolia, and Pinus contorta,	Important grouse food; toxic to humans.
CARYOPHYLLACEAE			
Arenaria congesta Nutt. Fremont, ID; T14N R44E SEC 29 NW 1/4; 6410'	common	Dry to moist roadsides and meadows, to open woods and rock crevices, usually in areas where grasses grow sparsely; with Poa nervosa, Potentilla gracilis, Potentilla diversifilia, and Pinus contor	<u>ta</u> .
Arenaria laterifolia L. Fremont, ID; T10N R43E SEC 17 NE 1/4; 5840'	common	Moist open woods and shady roadsides; with Pinus contorta, Arenaria conjesta, and Carex geyeri.	

Name	Status	Habitat Information	Known Economic Importance
Arenaria rubella (Wahleub.) J.E. Smith Fremont, ID; T12N R45E SEC 4 NW 4; 7500'	rare	Pockets of soil on south faces of boulders; I found it only in canyons draining the Madison Plateau; with Draba praealta, Poa nervosa, and Cystopteris fragilis.	
Cerastium arvense L. Fremont, ID; T8N R44E SEC 21 NE 4; 6000'	unknown	Disturbed (grazed) areas along Conant Creek; with Antennaria luzuloides, Artemisia tridentata, Eriogonum heracleoides, and Agoseris glauca.	Weed.
Cerastium vulgatum L. Fremont, ID; Tl3N R44E SEC 34 NW 4; 6500'	uncommon	Moist open disturbed areas, roadsides, and edges of stockponds; with Rorippa curvisiliqua, and Spergularia rubra.	i Weed.
Lychnis alba Mill. Fremont, ID, T8N R45E SEC 6 NW 4; 5900'	COMMON	Disturbed roadsides, and edges of cultivated fields; with Verbascum thapsus, Agropyron repens, and Plantago major.	Scenic.
Sagina saginoides (L.) Britt. Teton, WY; T47N R118W SEC 1 SW ½; 6550'	uncommon to rare	Bare rocky areas, rock crevices and gravel bars; with Solidago canadensis, Bromus tectorum, and Madia glomerata.	
Silene menziesii Hook. Fremont, ID; T10N R43E SEC 17 NE 4; 5850'	uncommon	Moist open woods; with <u>Pinus contorta</u> , <u>Corallorhiza maculata</u> , and <u>Vaccinium</u> <u>scoparium</u> .	

			Known
Name	Status	Habitat Information	Economic Importance
Silene oregana Wats. Fremont, ID; T13N R43E SEC 27 NE 1/2; 6300'	common.	Dry open woods to meadows, clearcuts and subalpine slopes; with Pinus contorta, Senecio serra, and Hieracium cynoglossoides or with Abies lasciocarpa, Pinus albicaulis and Festuca idahoensis.	
Spergularia rubra (L.) Pres1 Fremont, ID; T11N R42E SEC 7 NE 4; 6350'	abundant	Disturbed areas, roadsides, lakeshores, and margins of stockponds; with Rorippa curvisiliqua, Lepidium virginicum, and Polygonum aviculare.	Disturbed area erosion control.
Stellaria longifolia Muhl. Fremont, ID; T14N R44E SEC 20 SW 1/4; 6410'	common	Moist depression in open area in woods; with <u>Salix spp.</u> , <u>Veronica scutellata</u> , <u>Galium trifidum</u> , and <u>Alopecurus alpinus</u> .	
Stellaria longipes Goldie Gallatin, NT; T14S R5E SEC 19 SW ½; 6800'	common	Moist open woods, shaded roadsides and riverbank meadows; with <u>Poaceae</u> spp., <u>Carex</u> spp., <u>Potentilla gracilis</u> , and <u>Aster foliaceus</u> .	
Stellaria obtusa Engelm. Fremont, ID; T14N R44E SEC 5 NW ½; 6450'	uncommon	Moist clearings along streams; with Poaceae spp., Salix spp., Hieracium cynoglossoides, and Pseudotsuga menziesii.	
CHENOPODIACEAE			•
Chenopodium album L. Fremont, ID; T9N R42E SEC 11 SE 1/4; 5200'	common	Roadsides and other more or less disturbed areas; with Artemisia dracunculus, Chenopodium fremontii, and Kochia scoparia.	Edible weed; seeds utilized by birds; also valuable early forage for wildlife & domestic stock.
Chenopodium fremontii Wats. Fremont, ID; T10N R43E SEC 17 NE ½; 5850'	common	Rocky areas in sagebrush hills and flats, in clearcuts, and along streams; also along roadsides; with Woodsia scopulina, Symphoricarpos oreophilus, and Pinus contorta; or with Chenopodium album, Kochia scoparia, and Artemisia dracunculus.	Same as above.

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Name	Status	Habitat Information	Economic Importance
CODYLCTAT			
CORNACEAE			
Cornus stolonifera	common	Riverbanks along swifter streams;	Streambank stabiliza-
Michx.		with Alnus incana, Betula glandulosa,	tion and game cover;
Fremont, ID; T10N R43E		Allium brevistylum, and Carex spp.	berries utilized by
SEC 17 NE ½; 5800'			wildlife; bark smoked
•			by Indians for nar- cotic effect.
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CRASSULACEAE			
Sedum stenopetalum Pursh	unknown	Rocky areas on brushy south facing canyon	Edible for humans.
Fremont, ID; T8N R44E		sides; with Artemisia tridentata,	
SEC 21 NE 4; 6000'		Zygadenus venenosus, Symphoricarpos	
	40	oreophilus, and Phlox longifolia.	
CUPRESSACEAE	•		
T	*;	Durling and and and an all and a substitution	TITUE CONTRACTOR CONTRACTOR
Juniperus communis L.	uncommon	Rocky scree and open woodlands; with	Winter forage value
Gallatin, MT; T14S R5E SEC 18 SE 4; 6700'		Potentilla glandulosa; or with Pinus contorta, Poaceae spp., and Vaccinium	for big game; berries are eaten by numerous
310 10 31 4, 0700		scoparium.	birds (Grosbeaks, Wax-
		Deoper Lune	wings, etc.).
CYPERACEAE			
Carex aquatilis	abundant	Margins of lakes and streams, usually	Seeds edible for
Wahi.		forming dense sod with itself and/or	humans; important
Fremont, ID; T15N R44E		other sedges; with <u>Carex spp., Salix</u>	ingredient in wildhay;
SEC 22 NE 坛; 8200'		spp., Gnaphalium palustre, and	excellent graze; im-
*		Plagiobothrys scouleri.	portant spring food
	*		for many animals and
			extremely important
			erosion control and
			soil builders.
		Charles and the Course manuals	
Carex bebbii Olney	unknown	Streambank; with Carex rostrata,	Same on abarra
Fremont, ID; T9N R44E		Scirpus microcarpus, and Salix spp.	Same as above.

Name	Status	Habitat Information	Known Economic Importance
Carex aurea Nutt. Fremont, ID; T12N R44E SEC 29 NW 坛; 6400'	unknown	At waters edge along streams; with <u>C</u> . buxbaumii, <u>Potentilla palustris</u> , <u>Spiranthes romanzoffiana</u> , and <u>C</u> . canescens.	Same as above.
Carex brunnescens (Pers.) Poir. Fremont, ID; T11N R45E SEC 9 SW ½; 7200'	unknown	On boulders along woodland stretch of Partridge Creek; with <u>Juncus hallii</u> , <u>Veronica wormskjoldii</u> , <u>Trisetum wolfii</u> , <u>Solidago multiradiata</u> , and <u>Pinus contorta</u>	Same as above.
Carex buxbaumii Wahl. Fremont, ID; T12N R44E SEC 29 NW 1/2; 6400'	unknown	At waters edge along streams; with <u>C</u> . aurea, <u>C</u> . interior, <u>Spiranthes</u> romanzoffiana, and <u>Potentilla</u> palustris.	Same as above.
Carex canescens Bailey Fremont, ID; T14N R44E SEC 20 SW 4; 6400'	common	Forming dense sods in marshy areas adjacent to streams and springs; with Danthouia californica, Carex lanuginosa, Juncus ensifolius, and Carex aquatilis.	Same as above.
Carex cusickii Mackenzie Fremont, ID; T13N R43E SEC 24 SW 4; 6400'	unknown	Marshes; with <u>Pedicularis</u> groenlandica, <u>Juncus ensifolius</u> , <u>Senecio</u> <u>sphaerocephalus</u> and <u>C. simulata</u> .	Same as above.
Carex deweyana Schw. Fremont, ID; T12N R43E SEC 1 SW 4; 6300	common	On margins of dry, heavily grazed sage- brush flats; with <u>Collomia linearis</u> , <u>Cryptantha torreyana</u> , and <u>Artemisia</u> <u>tridentata</u> .	Same as above.
Carex douglasii Boott Fremont, ID; T11N R45E SEC 9 SW 4; 7200' Carex geyeri Boott Fremont, ID; T10N R43E	common	Moist roadsides and open areas to dry creek beds and subalpine meadows; with Hordeum brachyantherum, Potentilla gracilis, and Festuca idahoensis; or with Eriogonum flavum, Ivesia gordonii, an Solidago nana. In open moist to dry woods; with Pinus contorta, Arnica cordifolia, Vaccinium	Same as above.
SEC 8 SE 12; 5900'	and the second second	scoparium, and Sorbus scopulina; also persists in clearcut areas.	

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Name		Status	Habitat Information	Economic	<u>Importance</u>
Carex hoodii Boo Fremont, ID; T SEC 15 NE 4; 6	10N R42E	common	Moist areas in woods, clearings or along streambanks, usually not in water; with Carex raynoldsii, Poa nervosa, Delphinium nuttallianum, and Koeleria cristata.	Same as	above.
Carex interior L.H. Bailey Fremont, ID; T SEC 29 NW 1/4; 6	12N R44E	unknown	At waters edge along streams; with <u>C</u> . aurea, <u>C</u> . buxbaumii, <u>Spiranthes</u> romanzoffiana and <u>Potentilla palustris</u> .	Same as	above.
Carex lanuginosa Fremont, ID; T SEC 20 SW 4; 6	14N R44E	common	Marshy areas near streams and springs; with <u>Carex aquatilis</u> , <u>Carex canescens</u> , <u>Juncus ensifolius</u> , and <u>Danthonia</u> <u>californica</u> .	Same a	s above.
Carex lenticulari Fremont, ID; T SEC 26 SE 4; 6	10N R45E	unknown	Lakeshore with Gnaphalium palustre, Cyperus aristatus, and Ranunculus flammula.	Same as	s above.
Carex luzulina C Fremont, ID; T SEC 23 SW 4; 7	14N R44E	unknown	Marshy area in lush vegetation in and adjacent to springs; with <u>Gentiana</u> detonsa, Aster chilensis, and <u>Mimulus</u> guttatus.	Same as	s above.
Carex microptera Mackenzie Fremont, ID; T SEC 11 NW 4; 7		common	Lakeshores, riverbanks, to exposed sub- alpine ridges of Mt. Two Top. Very common and widely distributed; with <u>Carex hoodii</u> , <u>Carex aquatilis</u> , and <u>Luzula parviflora</u> ; or with <u>Carex phaeocephala</u> , <u>Phacelia</u> <u>sericia</u> , and <u>Pinus albicaulis</u> .		s above.
Carex muricata I Fremont, ID; T SEC 20 SW ½; 6	14N R44E	unknown	Moist terrace bank between sagebrush meadow and marsh; with <u>Campanula</u> rotundifolia, <u>Poaceae</u> spp., and <u>Danthonia</u> unispicata.	Same as	s above.

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Name	Status	Habitat Information	Economic Importance
Carex nebraskensis Dewey Fremont, ID; T8N R45E SEC 11 SW 4; 6200'	common	Moist carex meadow surrounding dry creek bed; with <u>Carex microptera</u> , <u>Delphinium burk el</u> , <u>Trifolium pratense</u> , and <u>Agrostis alba</u> .	Same as above.
Carex petasata Dewey Fremont, ID; T14N R44E SEC 20 SW 4; 6400'	unknown	Moist meadow near marshy area; with Carex hoodii, Carex raynoldsii, and Geranium viscosissimum.	Same as above.
Carex praticola Rydb. Gallatin, MT; T14S R5E SEC 18 SE 4; 6750'	unknown	Riverbank meadow and open woods; with Luzula parviflora, Carex microptera, Carex hoodii, and Aconitum columbianum.	Same as above.
Carex raynoldsii Dewey Gallatin, MT; T14S R5E SEC 19 NE 4; 6800'	common	Moist meadows and hillsides; with Antennari corymbosa, Carex rossii, and Ribes lacustre; to subalpine ridges and meadows on Mt. Two Top; with Pinus albicaulis, Potentilla diversifolia, and Poaceae spp.	a Same as above.
Carex rosii Boott Gallatin, MT; T14S R5E SEC 19 NE ½; 6800'	common	In and adjacent to moist woods; with Carex raynoldsii, Antennaria corymbosa, and Ribes lacustre.	Same as above.
Carex rostrata Stokes Fremont, ID; T14N R44E SEC 20 SW 坛; 6400'	Common	Marshy areas (often in dense sods) and streambanks; with <u>Carex aquatilis</u> , <u>Carex canescens</u> , <u>Carex lanuginosa</u> , and <u>Danthonia californica</u> .	Same as above.
Carex simulata Mackenzie Fremont, ID; T15N R44E SEC 15 SW ½; 8200'	common	Moist to wet meadows; with <u>Carex</u> aquatilis, <u>Gentiana detonsa</u> , and <u>Salix</u> spp.	Same as above.
Carez vesicaria L. Fremont, ID; T15N R44E SEC 22 NE ½; 8200'	unknown	Edge of creek in upper part of Tygee basin; with <u>Carex aquatilis</u> , <u>Plagiobothrys scouleri</u> , and <u>Salix spp</u> .	Same as above.

	* - *		Known
Name	Status	Habitat Information	Economic Importance
Cyperus aristatus Rottb. Fremont, ID; T10N R45E SEC 26 SE 4; 6500'	unknown	Shore of Horseshoe Lake; with <u>Carex</u> <u>lenticularis</u> , <u>Gnaphalium palustre</u> , and <u>Ranunculus flammula</u> .	Same as sedges, but in a minor role.
Eleocharis acicularis (L.) R & S Fremont, ID; Tlln R42E SEC 7 NW ½; 6400'	common	Shallow water and mud along streams, in marshes and at edges of lakes and stock ponds; with <u>Veronica peregrina</u> , <u>Eleocharis palustris</u> , and <u>Rorippa curvisiliqua</u> .	Same as sedges, but no hay value.
Eleocharis palustris (L.) R & S Fremont, ID; T11N R42E SEC & NW4; 6400'	common	Marshy areas, lake edges, streambanks, and edges of stockponds; with Eleocharis acicularis, Veronica peregrina, and Rorippa curvisiliqua.	Same as sedges.
Eleocharis pauciflora (Light f.) Link Fremont, ID; T12N R43E SEC 32 SE 4; 6400'	unknown	At edge of Carex bog on wet ground; with Carex rostrata, Mimulus breviflorus, Polygonum confertifolium and Orobanche uniflora.	Same as sedges, but no hay value.
Scirpus microcarpus Pres1 Fremont, ID; T9N R44E SEC 4 SE 4; 5650	Unknown	Streambank behind beaver dam; with Salix spp., Carex bebbii, and Carex rostrata.	Same as sedges, but in a minor role.
ELEAGNACEAE			
Shepherdia canadensis (L.) Nutt. Teton, Wy; T47N R118W SEC 1 SW ½; 6500'	unknown	Streambanks and gravel bars; with Lonicera involucrata, Alnus incana, and Populus trichocarpa.	Berries important in- gredient in pemmican; also utilized by wild- life.

Name	Status	Habitat Information	Known Economic Importance
EQUISETACEAE			
Equisetum arvense L. Fremont, ID; T15N R44E SEC 15 NW 1/4; 8000'	common	Wet to marshy areas around springs or lakes and along streams; with Populus tremuloides, Montia chamissoi, Salix spp., and Geranium richardsonii; or with Picea engelmannii, Parnassia fimbriata, and Cinna latifolia.	Edible to humans; young sprouts eaten by browsing animals.
Equisetum laevigatum A. Br. Fremont, ID; T13N R43E SEC 27 NE 4; 6280'	common	Bare areas on riverbanks or moist margins of sagebrush meadows; with Erigeron divergens, Agropyron spp., and Koeleria cristata.	Same as above.
ERICACEAE	• .		•
Arctostaphylos uva-ursi (L.) Spreng. Fremont, ID; Tl3N R43E SEC 2 SE 4; 6800'	common	Open woods and clearcuts (often rocky areas) with Pinus contorta, Gayophytum diffusum, and Lupinus argenteus.	Berries edible to humans and wildlife; provides winter browse
Chimaphila umbellata (L.) Bart. Fremont, ID; T9N R44E SEC 3 SW 4; 5700'	common	Open woods; with Pinus contorta, Vaccinium scoparium, and Campanula rotundifolia.	
Gaultheria humifusa (Grah.) Rydb. Fremont, ID; T14N R44E SEC 23 SW ½; 7000'	rare	Moist embankment along Thirsty Creek across from railroad tracks; with Gentiana detonsa and Mimulus guttatus.	Scenic; berries edible.
Pterospora andromeda Nutt. Fremont, ID; T14N R44E SEC 13 SE 1/2; 7800	common	Usually in depauperate pine woods; with Pinus contorta, Arnica cordifolia, and Corallorhiza maculata.	

			Known
Name	Status	Habitat Information	Economic Importance
Pyrola asarifolia Michx. Fremont, ID; T14N R44E SEC 20 NW 4; 6400'	common	Wet shady (wooded) areas next to marshes or streambanks; with Pinus contorta, Lonicera involucrata, and Castilleja miniata.	Scenic.
Fyrola chlorantha Sw. Gallatin, MT; T14S R5E SEC 19 NE 4; 6800'	common	Dry depauperate open woods with Pinus contorta.	Scenic.
Pyrola minor L. Fremont, ID; T13N R43E SEC 24 NW 4; 6400'	uncommon	Moist open woods along Buffalo River; with P. asarifolia, P. secunda, P. chlorantha, Picca engelmannii and Vaccinium scoparium.	Scenic.
Pyrola picta Smith Fremont, ID; T14N R44E SEC 23 SW 4; 7000'	uncommon	Dry depauperate woods with Pinus contorta.	Scenic.
Pyrola secunda L. Teton, WY; T47N R118W SEC 1 SE 4; 6550'	common	Moist woodlands near streams; with Osmorhiza chilensis, Galium triflorum, and Populus trichocarpa.	Scenic.
Vaccinium caespitosum Michx. Fremont, ID; T11N R45E SEC 9 SW ½; 7200'	common	Moist woodlands; with <u>Vaccinium</u> scoparium, <u>Pinus contorta</u> , and <u>Trisetum wolfii</u> .	Forage value; berries are edible.
Vaccinium globulare Rydb. Fremont, ID; T14N R44E SEC 23 SW 1/4; 7000'	common	Moist woods; with Lonicera utahensis, Pinus contorta, and Pseudotsuga menziesii.	Same as above.
Vaccinium scoparium Leiberg Fremont, ID; T11N R45E SEC 9 SW 4; 7200'	abundant	Open pine woods; with <u>Pinus contorta</u> , <u>Osmorhiza chilensis</u> , <u>Sorbus scopulina</u> , and <u>Prunus virginiana</u> ; or with <u>Pinus</u> <u>contorta</u> , <u>Vaccinium caespitosum</u> , and <u>Trisetum wolfii</u> .	Same as above.

Name	Status	Habitat Information	Known Economic Importance
EUPHORBIACEAE			
Euphorbia esula L. Fremont, ID; T9N R42E SEC 11 NE 4; 5500'	common	Sunny to shady disturbed areas with Pseudotsuga menziesii, Galium triflorum, and Poa pratensis.	Noxious weeds.
FABACEAE			
Astragalus agrestis Dougl. Fremont, ID; T12N R43E SEC 32 SE 4; 6400'	common	Moist, lush, grassy clearings in pine woods; with Potentilla gracilis, Calamagrostis rubesceus, Lupinus argenteus, Gerainium viscosissimum and Agoseris glauca.	Same as above. Scenic.
Astragalus alpinus L. Fremont, ID; T12N R4LE SEC 13 SE 1/4; 6400'	common	Moist open woods and adjacent meadows; with Pinus contorta, Poaceae spp., Lupinus argenteus, and Geranium viscosissimum; or with Populus tricho-	Toxic to both hu- mans and stock; seeds are eaten by wildlife and birds; important
		carpa, Osmorhiza chilensis , Pyrola secunda, and Galium triflorum.	source of soil nitrogen, as are most members of this family.
Lupinus argenteus Pursh Fremont, ID; T10N R43E SEC 8 SE ½; 6000	abundant	Moist open woods, open meadows and clear- cuts; with <u>Geranium viscosissimum</u> , <u>Pinus contorta</u> , <u>Achillea millefolium</u> , and <u>Castilleja miniata</u> .	Same as <u>Astragalus</u> .
Lupinus lepidus Dougl. Fremont, ID; T15N R44E SEC 15 NE ½; 7800'	common	Subalpine hillsides in open often bare areas and dry streambeds above 7500'; with <u>Pedicularis groenlandica</u> , <u>Luzula spicata</u> , and <u>Veronica wormskjoldii</u> .	Same as above.
Lupinus sericeus Pursh Fremont, ID; T14N R44E SEC 20 NW ½; 6400'	common	Dry meadows and roadsides; with Artemisia tridentata, Eriophyllum lanatum, Eriogonum heracleoides, and Castilleja longispica.	Same as above.

Name .	Status	Habitat Information	Known Economic Importance
Medicago lupulina L. Fremont, ID; T14N R43 SEC 25 NW 坛; 6420'	common E	Along Highway 191 within Targhee National Forest; with Melilotus officinalis, Trifolium repens, and Tanacetum vulgare.	Important ground cover, seeds are important for small birds, including doves; seeds edible for humans.
Medicago sativa L. Fremont, ID; T9N R42E SEC 11 SE 4; 5200'	common	Roadsides and waste areas; with Grindelia squarrosa, Cirsium arvense, and Melilotus officinalis.	Same as above (es- caped cultivar with considerable econom- ic importance).
Melilotus alba Desr. Fremont, ID; T9N R42E SEC 13 NW 4; 5200'	common	Disturbed roadsides, riverbanks and waste areas; with Arctium lappa, Carex spp., Urtica dioica, and Malva neglecta.	Same as above (not a cultivated species).
Melilotus officinalis (L.) Lam. Fremont, ID; T11N R45 SEC 9 SW 4; 7200'	common	Roadsides; with <u>Kochia scoparia</u> , <u>Helianthus annuus</u> , and <u>Salsola kali</u> ; or with <u>Trifolium repens</u> , <u>Trifolium dubium</u> and <u>Tanacetum vulgare</u> .	Same as above.
Trifolium longipes Nutt Fremont, ID; T11N R42 SEC 7 NW 4; 6400'		Moist meadows and roadsides; with Trifolium repens, Geum macrophyllum, Potentilla gracilis, and Poaceae spp.	Same as above.
Trifolium pratense L. Fremont, ID; T8N R45E SEC 11 SW 坛; 6200'	common	Moist meadows and roadsides; with Agrostis alba, Delphinium burkei, and Cirsium scariosum.	Same as Medicago Sativa (escaped cult- ivar with considerable economic importance).
Trifolium repens L. Fremont, ID; T14N R444 SEC 20 SW ½; 6400'	common	Moist meadows, roadsides and disturbed areas; with <u>Trifolium pratense</u> , <u>Potentilla gracilis</u> , <u>Poaceae</u> spp., and <u>Lepidium virginicum</u> .	Important soil builder & food for most animals.
Vicia cracca L. Fremont, ID; T10N R42: SEC 31 NE 4; 5600'	rare E	One plant found in recent gravel fill in roadway through farmland; no associates. 81	Same as <u>Astragalus</u> .

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Name	Status	Habitat Information	Economic Importance
FUMARIACEAE			
Corydalis aurea Willd. Gallatin, MT; T13S R5E SEC 32 NW ½; 6700'	rare	Dry road banks to dry rocky outcroppings; with Fragaria virginiana, Lupinus sericeus and Phlox multiflora; or with Purshia tridentata, Lithophragma bulbifera, and Dodecatheon conjugens.	
Dicentra uniflora Kell. Fremont, ID; T9N R42E SEC 12 SE ½; 5500'	very common	Bare, wet ground often below melting snowbanks or on recently snowfree ground; with Fritillaria pudica, Nemophila breviflora and Artemisia tridentata.	Scenic; poisonous to livestock.
GENTLANACEAE			
Frasera speciesa Dougl. Fremont, ID; T8N R45E SEC 11 SW 4; 6200'	common	Moist to semi-dry open woods and meadows to 8600' on Mt. Two Top; with Pinus contorta and Poaceae spp.; or with Poaceae spp., Lupinus argenteus, Carex spp., Wyethia amplexicaulis, and Wyethia helianthoides.	Important game browse; poisonous for humans.
Gentiana affinis Griseb. Fremont, ID; T8N R45E SEC 11 SW 14; 6200'	rare	Found only in Chain Lakes area near Conant Creek; with <u>Castilleja cusickii</u> , <u>Carex spp.</u> , and <u>Trifolium pratense</u> .	Scenic.
Gentiana amarella L. Teton, WY; T47N R118W SEC 16 SW 坛; 6520'	common	Moist to wet areas adjacent to lakes and streams, in meadows and in woods; with Madia glomerata, Alopercurus aequalis, and Rumex crispus; or with Picea engelmanii, Elymus glaucus, and Habenaria saccata.	Scenic.
Gentiana detonsa Rottb. Fremont, ID; T15N R44E SEC 15 SW 1/2; 8500'	common	In wet meadows and spring areas and along streambanks; with <u>Carex lenticularis</u> and <u>Salix spp.</u> ; or with <u>Aster chilensis</u> , <u>Carex luzulina</u> , and <u>Mimulus guttatus</u> .	Scenic.

					Known
Name	Stat	us H	abitat Information		Economic Importance
GERANIACEAE					
Geranium richards Fisch. & Trautv. Fremont, ID; T. SEC 20 SW 坛; 64	 ,	<u> </u>	and wet to marshy mead 3. <u>viscosissimum</u> in we	Osmorhiza occidentalis	scenic.
Geranium viscosiss F & M Fremont, ID; TI SEC 8 SE 4; 590	LON R43E	0 <u>9</u> <u>1</u> <u>0</u>	outs; with <u>Poaceae</u> specidentale, <u>Arnica</u> co	ordifolia, and th <u>Achillea millefoli</u>	
GROSSULARIACEAE					•
Ribes aureum Purs Fremont, ID; TI SEC 17 NE 4; 59	ON R43E	<u>H</u> a S	Riverbanks, often in r Reuchera parvifolia, C and Amelanchier alnifo Calix spp., <u>Prunus vir</u> Lychnis alba (Willow C	ornus stolonifera, blia; or with giniana, and	Berries abundant & important for wildlife berries edible for humans.
Ribes cereum Doug Fremont, ID; T: SEC 20 NE 4; 5:	LON R42E 700'	Ri gr Ji ma	ry roadsides in ecotoriver Plain and Forest; randidentatum, Pseudotuniperus scopulorum aracrophylla.	with <u>Acer</u> suga menziesii, nd <u>Balsamorhiza</u>	Same as above. Same as above
Fremont, ID; T1 SEC 8 SE 4; 600	ON R43E	o		and roadbanks; with	berries not so abun- dant.
Ribes montigenum McClatchie Fremont, ID; T15 SEC 16 SE 4; 86		a	mong rocks and under nd <u>Pinus albicaulis</u> k ummit of Mt. Two Top.	rumholtz near	Same as above (but not common enough to be of much importance).

Name	Status	Habitat Information	Known Economic Importance
A 1 United Notes		THE RESERVE OF THE PROPERTY OF	
Ribes viscosissimum	very common	Open, usually diverse, pine communities	Same as above.
Pursh		with Salix scouleriana, Vaccinium	
Fremont, ID; T10N R43E	;	globulare, Lonicera utahensis, and	
SEC 24 NE 4; 5800'		Arnica cordifolia.	
HALORAGIDACEAE			
Myriophyllum spicatum L.	common	Shallow standing water in lakes; with	Important water fowl
Teton, WY; T47N R118W	Common	Potamogeton spp., Lemna minor,	food and moose browse.
SEC 16 SW ½; 6520'	•	Sparganium emersum and Nuphar polysepalum	
51.0 10 5N 4, 0520	•	byal gantan emeloun and maphal polysepalun	-
HIPPURIDACEAE			
intra organisma.			
Hippuris vulgaris L.	common	In duck pond and below its dam at Elk	Same as above (also
Fremont, ID; T12N R43E		Creek Ranch; with Glyceria grandis,	edible to humans).
SEC 14 SW 1/4; 6290'	•	Ranuculus aguatilis and Myriophyllum	
		spicatum.	
IYDROPHYLLACEAE		er taribinatura una retra fraguesa.	
Hesperochiron pumilis	common	Moist open ground among scattered	Scenic.
(Griseb.) Porter		sagebrush; with Artemisia tridentata,	
Fremont, ID; T12N R41E	• •	Lithophragma bulbifera, and Dodecatheon	
SEC 11 SW 4; 6400'	•	conjugens.	
1 .			
Hydrophyllum capitatum	common	Moist open shade; with Pseudorsuga	Scenic; very important
Dougl.		menziesii, Populustremuloides,	early food source for mamma
Fremont, ID; T9N R42E		Symphoricarpos albus, and Prunus	edible for humans.
SEC 12 NE 4; 5500'	•		
Jac ma - 1.2 4, 3300		virginiana.	
		Commence of the commence of th	
Nemophila breviflora Gray	very common	Widespread on moist bare disturbed	Binds soil in disturbed
Nemophila breviflora Gray Fremont, ID; T9N R42E	very common	Widespread on moist bare disturbed ground; with Artemisia tridentata,	Binds soil in disturbed areas.
Nemophila breviflora Gray	very common	Widespread on moist bare disturbed ground; with Artemisia tridentata, Collinsia parviflora, and Delphinium	
Nemophila breviflora Gray Fremont, ID; T9N R42E	very common	Widespread on moist bare disturbed ground; with Artemisia tridentata,	
Nemophila breviflora Gray Fremont, ID; T9N R42E	very common	Widespread on moist bare disturbed ground; with Artemisia tridentata, Collinsia parviflora, and Delphinium	
Nemophila breviflora Gray Fremont, ID; T9N R42E SEC 13 NW 1/4; 5200'		Widespread on moist bare disturbed ground; with Artemisia tridentata, Collinsia parviflora, and Delphinium nuttallianum.	areas.

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				Known
Name	**	Status	Habitat Information	Economic Importance
Phacelia het Pursh Teton, WY; SEC 1 SW 1	T47N R118W	common	Dry woods in southeastern part of area; with Pseudotsuga menziesii, Spiraea betulifolia, and Ceanothus velutinus; or with P. hastata under Populus tremuloides.	Same as above.
HYPERICACEAE				
Hypericum m (Gray) Brit Teton, WY SEC 16 NE	t. ; T48N R118W	unknown	On bank of Falls River; with Senecio pseudaureus, Carex aquatilis and Salix spp.	
	•			
	<u>angustifolium</u>	common	Moist, open meadows; with Poaceae spp.,	Scenic.
Mill. Fremont, I SEC 7 NE 3	D; T11N R42E	***************************************	Potentilla arguta, Wyethia amplexicaulis, and Wyethia helianthoides.	
JUNCACEAE				
Juncus balti Teton, WY; SEC 16 NE	T48N R118W	unknown	At waters edge along the Falls River; with J. nevadensis, Picea engelmannii, and Aster spp.	
	Dnis L. ID; T12N R43E 日本; 6400'	unknown	On wet ground in sunny location at edge of Carex bog; with <u>Carex rostrata</u> , <u>Mimulus breviflorus</u> , <u>Polygonum confertifolium</u> and <u>Eleocharis pauciflora</u> .	Same as above.

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Name	Status	Habitat Information	Known Economic Importance
Juncus confusus Cov. Fremont, ID; T8N R45E SEC 16 SE 1/4; 6000'	common	Bare open hillsides to moist meadows; with Viguiera multiflora, Erigeron Divergens, and Rosa woodsii.	The following applies generally to rushes: Important for streamban stabilization; important in wild hay; important early graze for livestock and wild-lifesimilar to sedges in these respects but less abundant and slightly less palatable
Juncus ensifolius Wikst. Fremont, ID; T14N R44E SEC 20 SW 1/2; 6400'	common	Moist to wet depressions, lake edges and streambanks in open to lightly shaded locations; with Carex lanuginosa, Carex aquatilis, and Angelia arguta; or with Carex stipata, Glyceria grandis, and Rorippa nasturtium-aquaticum.	Same as above.
Juncus hallii Engelm. Fremont, ID; T15N R44E SEC 15 SW 4; 8200'	unknown	Moist open hillsides in meadows and clearcuts; with <u>Stipa pinetorum</u> , <u>Abies</u> <u>lasciocarpa</u> , and <u>Gayophytum diffusum</u> .	Same as above.
Juncus longistylis Torr. Fremont, ID; T13N R43E SEC 14 SE 4; 6400'	unknown	Marshes; with <u>Carex lanuginosa</u> , <u>Veronica scutellata</u> , and <u>Arnica</u> <u>chamissonis</u> .	Same as above,
Juncus nevadensis Wats. Teton, WY; T48N R118W SEC 16 NE 4; 6000'	ınknown	At waters edge along the Falls River; with J. balticus, Picea engelmannii, and Aster spp.	Same as above.

Name	Status	Habitat Information	Known Economic Importance
Juncus tenuis Fremont, ID; T9N R42E SEC 11 NE 1/4; 5200'	uncommon	Streambanks along badly eroded banks of Willow Creek; with <u>Juncus ensifolius</u> , <u>Carex bebbi</u> , <u>Ribes aureum</u> , and <u>Salix spp.</u> ; Found in only one location but possibly more common than indicated.	Same as above,
Luzula campestris (L.) DC. Gallatin, MT; T14S R5E SEC 18 SE 4;	common	Moist open to lightly wooded riverbanks and meadows; with Luzula parviflora, Carex hoodii, and Pinus contorta.	
Luzula parviflora Desv. Gallatin, MT; T14S R5E SEC 18 SE 4; 6750'	uncommon	Same habitats as L. campestris.	•
Luzula spiceta (L.) DC. Fremont, ID; T13N R45E SEC 11 NW 4; 7750'	uncommon	Subalpine streambanks and dry beds; with Pinus contorta, Abies lasciocarpa, Pedicularis groenlanelica, and Lupinus lepidus.	

JUNCAGINACEAE				
Triglochin mari	timum L.	uncommon	Marshes; with <u>Carex simulata</u> , <u>Juncus</u> ensifolius, and <u>Pedicularis</u>	Contains cyanide; slightly poisonous to livestock;
	• • •		groenlandica.	seeds can be roasted and eaten by humans.

Name	Status	Habitat Information	Known Economic Importance
LAMIACEAE			
Agastache urticifolia (Benth.) Kuntze Fremont, ID; T14N R44E SEC 29 NW 4; 6400'	common	Dry rocky hillsides to moist roadsides and waste areas; with Rosa woodsii, Viguiera multiflora, and Juncus confusus; or with Mackelia floribunda, Lepidium virginicum, Matricaria matricarioides, and Salix sp.	Scenic.
Mentha arvensis L. Teton, WY; T47N R118W SEC 16 SW 4; 6500'	common	Open grassy lake edges; with <u>Scutellaria</u> galericulata, <u>Carex</u> aquatilis, and <u>Sium</u> suave.	Tea and jelly can be made from leaves and flowers.
Prunella vulgaris L. Fremont, ID; T14N R44E SEC 18 SE 12; 6400'	common	Moist open to bare areas in meadows, often near streams and lakes; with Campanula rotundifolia, Carex muricata, and Rorippa nasturtium-aquaticum.	Tea can be made from herbaceous parts; once considered to be of medicinal value.
Scutellaria galericulata L. Teton, WY; T47N R118W SEC 16 SW 12; 6520'	common	Open grassy lake edges; with Mentha arvense, Carex aquatilis, and Sium suave.	
LEMNACEAE			
Lemna minor L. Teton WY; T47N R118W SEC 16 SW 4; 6500'	common	Shallow standing water in lakes, pools and along streams; with Spirodela polyrhiza, Utricularia vulgaris, and Myriophyllum spicatum.	Utilized by waterfowl; harvested and used in other countries for livestock food.
Lemna trisulca L. Teton, WY; T47N R118W SEC 14 NW 4; 6500'	Common	Floating or submerged in shallow streams; with <u>Salix spp., Carex spp.</u> and <u>Ranunculus aquatilis</u> .	Same as above.

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			Known
Name	Status	Habitat Information	Economic Importance
Spirodela polyrhiza (L.)	common	Shallow standing water in lakes and	Same as above.
Schleid.		pools and along streams; with Lemna	
Teton, WY; T47N R118W	•	minor, Utricularia vulgaris, and	
SEC 16 SW 4; 6500'		Myriophyllum spicatum.	
3EO EO BR 4, 0000	•	Ty Laply Adom opacessing	•
LEMNANTHACEAE		The second secon	
TELIMINI THEORY			
Floerkia proserpinacoides	A OMITTO A	Bare wet ground, usually near streams;	
Willd.		with Hierochloe odorata, Galium bifolium,	
Fremont, ID; T9N R43E		Cretaegus douglasii, and Nemophila	
SEC 12 SE 4; 5200'		breviflora.	
	•		
LENTIBULARIACEAE			
Utricularia vulgaris (L.)	common	Shallow water among reeds at edges of	Scenic.
Teton, WY; T47N R118W		lakes; with Lemna minor, Spirodela	
SEC 16 SW 1; 6500'		polyrhiza, and Carex aquatilis.	
		The second contract of	
LILIACEAE	•		
	•		
Allium brevistylum Wats.	common	Moist bare ground, and in rock crevices	Edible for humans;
Fremont, ID; TION R43E	• • • • • • • • • • • • • • • • • • • •	in shady areas along streams; with	seeds highly favored
SEC 17 NE 2; 5800'		Cornus stolonifera, Alnus incana, and	by doves; scenic.
0110 11 112 4, 0000		Allium geyeri.	by doves, seeme.
	,	Attum gevert.	
ATT I TO THE TOTAL TIME		Material Commence of a discountry of the commence	•
Allium geyeri Wats,	common	Moist open to shady areas along streams,	Same as above.
Fremont, ID; T10N R43E		and in Carex meadows; with Lepidium	
SEC 17 NE 坛; 5800!		virginicum, Camassia quamash, and	
•	•	Penstemon deustus.	
	•	The state of the s	
Allium shoenoprasum L.	common ·	Open wet meadows; with Cirsium	Same as above.
Fremont, ID; T14N R44E		scariosum, Valeriana edulis, and	
SEC 19 NE 4; 6400'		Pedicularis groenlandica.	$\mathbf{v}_{i} = \mathbf{v}_{i} + \mathbf{v}_{i} + \mathbf{v}_{i}$
0110 17 111 15 0400		rediction of contaminations	
Portion douglants Wate	common	Down to model and mandage populty	P11- addhla far humane
Brodiaea douglasii Wats.	COMMON	Dry to moist open meadows usually	Bulbs edible for humans
Fremont, ID; T10N R42E		among sparse vegetation: with Agropyron	scenic.
SEC 14 NW 4; 6200'	•	caninum, Festuca idahoensis, and	

Name	Status	Habitat Information	Known Economic Importance
Calochortus nuttallii T & G Fremont, ID; T13N R43E SEC 11 SE 34; 6400'	common	Open pine woods and clearcuts; with Pinus contorta, Calamagrostis rubescens, Arnica cordifolia, and Gerainium viscosissimum.	Scenic; State flower of Utah; tubers eaten by bears and rodents; seed pods eaten by domestic and Big Horn sheep.
Camassia quamash (Pursh) Greene Fremont, ID; T10N R43E SEC 17 NE 1/4; 5800'	common	Moist open riverbanks and meadows; with Allium geyeri, Valeriana occidentalis, and Lepidium virginicum.	Important food source for Indians; scenic.
Disporum trachycarpum (Wats.) Benth. & Hook. Fremont, ID; TION R43E SEC 8 SE 1/4; 5900'	common	Moist shady woods; with Pinus contorta, Thalictrum occidentale, and Fragaria virginiana; or with Pseudotsuga Menziesii, Rubus parviflorus, and Goodyera oblongifolia.	Scenic; berries edible and were utilized by Blackfoot Indians.
Erythronium grandiflorum Pursh Fremont, ID; T15N R44E SEC 15 NE 1; 7800'	common	Moist to wet areas from exposed snowbanks to lush undergrowth in shady woods; with Lewesia pygmaca, Androsace septentrionalis, and Pinus albicaulis or with Picea engelmannii, Streptopus amplexifolius, and Ranunculus alismaefolius.	leaves edible for humans.
Fritillaria atropurpurea Nutt. Fremont, ID; T10N R43E SEC 17 NE 4; 5800'	(P.common	Shaded, rocky outcroppings along bank of Snake River near Sheep Falls; with Dodecatheon pulchellum, Clematis columbiana, Pinus contorta, and Cystopteris fragilis.	Scenic; bulbs edible for humans.
Fritillaria pudica (Pursh) Spreng. Fremont, ID; T9N R42E SEC 13 SE 4; 5200'	common	Bare open disturbed ground; with Nemophila breviflora, Dicentra uniflora, and Lithophragma bulbifera.	Scenic; eaten by wild game; edible for humans.

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•			Known
Name	Status	Habitat Information	Economic Importance
Smilacina racemosa (L.)	common		Edible after considerable
Desf. Fremont, ID; T11N R42E	•.	Populus tremuloides, Geranium richardsonii, Castilleja miniata, and Equisetum arvense.	preparation.
SEC 7 NW 14; 6400'	· ·		
Smilacina stellata (L.)	common	Moist woods and open aspen groves	Same as above.
Desf.		generally in more shady areas than S. racemosa; with Actaea rubra,	. ·
Fremont, ID; T10N R43E SEC 8 SE 4; 5900'		Clematis columbiana, and Pinus	
		contorta; or with Pseudotsuga menziesii, Osmorhiza	
		Androsace filiformis.	
Streptopus amplexifolius	common	Moist to wet shady woods along streams	Berries edible for
(L.) DC. Fremont, ID; T15N R44E		and brooks; with <u>Picea engelmanii</u> , <u>Ribes lacustre</u> , and Rorippa nasturtium-	humans; scenic.
SEC 15 NE 4; 7800'	·	aquaticum; or with Picea engelmanii,	
		Erythronium grandiflorum, Caltha leptosepala, and Habenaria saccata.	
	4	reproseptita, and mascharia saccaca.	
Zigadenus venenosus Wats. Fremont, ID; T14N R44E	A common	Dry open sagebrush flats; with	Poisonous; can be confused
SEC 17 SW 4; 6400'		Artemisia tridentata, Erigeron glabellus, and Festuca idahoensis;	with edible bulbs in this family, especially when not
		And and another state of the st	in flower.
LORANTHACEAE			
Arceuthobium americanum	abundant	Parasitic on Pinus contorta throughout	Very important noxious
Nutt. Teton, WY; T47N R118W		area.	parasite which destroys or reduces quality of
SEC 1 SW 4; 6550'			lumbering trees.
MALVACEAE	•		
Iliamna rivularis (Dougl.)	common	Moist open road banks and meadows;	Scenic; some browse
Greene	7	with Tragopogon dubius, Stipa occidentalis,	value for big game.
Teton, WY; T47N R118W SEC 1 SW 4; 6650'		Geranium viscosissimum, and Achillea millefolium.	
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Name	Status	Habitat Information	Economic Importance
NYMPHAEACEAE			
Nuphar polysepalum Engelm. Teton, WY; T47N R118W SEC 16 SW 4; 6500'	abundant	Covering large areas of lakes throughout area; with, but in deeper water than, Potamogeton alpinum, Potamogeton natans, and Myriophyllum spicatum.	Roots and seeds utilized as food by Indians; provides good fish habitat in some areas; provides cover for waterfowl.
ONAGRACEAE			3. 3.
Epilobium alpinum L. Gallatin, MT; T14S R4E SEC 23 NE 4; 7400'	common	Moist clearcuts on bare ground; with Poa reflexa, Mimulus lewesii, and Gayophytum diffusum.	3
Epilobium angustifolium L. Teton, WY; T47N R118W SEC 4 SW 14; 6400'	common to abundant	Moist woods, clearcuts and roadsides on disturbed to stable soil; with Pseudotsuga mensiesii, Helianthella quinquenervis, and Ligusticum filicinum; or with Pinus contorta, Sorbus scopulina, and Arnica cordifolia.	Important erosion control; leaves edible for man and wild game.
Epilobium glandulosum Lehm. Fremont, ID; T11N R42E SEC 7 NW 4; 6400'	common	Moist bare areas; with Abies lasciocarpa, Barbarea orthoceras, and Draba stenoloba.	Minor waterfowl usage.
Epilobium watsonii Barbey Fremont, ID; T14N R44E SEC 20 SW ½; 6500'	common	Moist barea areas in clearcuts, and along marshes and streams; with Juncus ensifolius, Galium trifidum, and Potentilla biennis.	Minor waterfowl usage.
Gayophytum diffusum T. & G. Teton, WY; T47N R118W SEC 1 SW ½; 6550' Gayophytum humile Juss. Fremont, ID; T10N R42E	abundant unknown	Clearcuts, roadsides and waste areas to sagebrush flats; with Solidago missouriensi Bromus tectorum; and Madia glomerata; or with Artemisia tridentata, Polygonum douglasii and Cryptantha torreyana. Moist clearing in open pine woods; with Carex hoodii, Carex raynoldsii,	<u>s</u> ,
SEG 15 NE 1; 6200'		Poa nervosa, and Delphinium nuttallianum; found at only one location.	

			Known
Name	Status	Habitat Information	Economic Importance
T & G Fremont, ID; T13N R45E SEC 10 NE 坛; 7500'	uncommon	Thin moist soil on south facing ledges of rock outcroppings along streams; with Potentilla glandulosa, Draba praealta, and Heuchera parvifolia.	
Oenothera breviflora T. & G. Fremont, ID; T12N R42E SEC 17 NW 1/2; 6300'	common	On mudflats along shore and on drying bed of Island Park Reservoir; with Rorippa obtusa and Potentilla anserina.	Some browse value for wild game.
Cenothera subacaulis (Pursh) Garrett Fremont, ID; T12N R41E SEC 1 SE 1/2; 6400'	common	Margins of stock pond at Lyle Springs; with <u>Oenothera tanacetifolia</u> , <u>Spergularia rubra and Rorippa curvisiliqua</u> ; found only at this location.	Same as above.
Oenothera tanacetifolia T. & G. Fremont, ID; T11N R42E SEC 7 NE 坛; 6400'	uncommon	Margins of stock pond at Lyle Springs; with Oenothera subacaulis, Spergularia rubra, and Rorippa curvisiliqua.	Same as above.
OPHIOGLOSSACEAE			
Botrychium multifidum (Gmel.) Trevis. Fremont, ID; T12N R44E SEC 29 NW 1/2; 6400' ORCHIDACEAE	uncommon	Wet heavy soil in open shade along Warm River; with Vaccinium scoparium, Sisyrinchium angustifolium and Fragaria virginiana.	
Calypso bulbosa (L.) Oakes Fremont, ID; T10N R43E SEC 24 NE 4; 5800'	common*	Well established undisturbed lodge pole pine woods; with <u>Vaccinium scoparium</u> , <u>Vaccinium globulare</u> , <u>Lonicera utahensis</u> , and <u>Arnica cordifolia</u> .	Highly valued as a scenic but fragile resource. All species of orchids have edible tubers but should be eaten only in emergencies because of their high aesthetic value to botanists and plant lovers.

	:		Known
Name	Status	Habitat Information	Economic Importance
Corallorhiza maculata Raf.	common	Open woods; under Pinus contorta, with	Scenic.
Fremont, ID; T10N R43E	•	Poaceae spp., Geranium viscosissimum,	$(x_{ij})_{ij} = (x_{ij})_{ij} = (x_{ij})_{ij$
SEC 8 SE ¼; 6000'		and Lupinus argenteus.	
0 11 11 2 2			3 •
Corallorhiza mertensiana	uncommon	Open depauperate woods at higher	Scenic
Bong. Gallatin, MT; T14S R4E		elevations; under <u>Pinus</u> contorta, with <u>Pedicularis</u> racemosa and	
SEC 22 NW 4; 7600'		Vaccinium scoparium.	
020 22 KH 4, 7000	·	T GG	
Goodyera oblongifolia Raf.	uncommon	Shady to somewhat open woods; with	
Fremont, ID; T10N R43E	. •	Pseudotsuga menziesii, Rubus parviflora,	
SEC 25 SE 坛; 5900'	•	and Disporum trachycarpum; also under	
•		Pinus contorta.	
		Was Imparation 1	***
Habenaria dilatata (Pursh)	common	Marshy carex meadows, wood margins and edges of streams and springs, with	very scenic.
Fremont, ID; T14N R44E		Geranium richardsonii, Pedicularis	
SEC 20 SW 12; 6400'		groenlandica, Thalictrum occidentale,	
20 20 21 4, 0400		and Carex aquatilis.	
•	7 · · · · · •	and an area of the artists of the control of the co	•
Habenaria hyperborea	uncommon	Marshy bank of Willow Creek under	Scenic.
(L.) R. Br.		willows; with Mimulus moschatus,	
Fremont, ID; T9N R42E		Ranunculus macounii, and Veronica	
SEC 11 NE 1/4; 5500'		anagallis-aquatica,	
Habenaria saccata	rare	Wet shady woods on north side of Mt.	Scenic.
Greene		Two Top; with Pices engelmannii,	ocenic.
Fremont, ID; T15N R44E	•	Erythronium grandiflorum, Streptopus	
SEC 15 NE ½; 7800'	·	amplexifolius and Caltha leptosepala;	
•		Stay San De La Reside	
Habenaria unalascensis	uncommon	Clearings in moist woods; with	
(Spreng.) Wats.		Pseudotsuga menziesii, Aster conspicuus,	
Fremont, ID; T10N R43E	2 2 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	and Rosa woodsii.	
SEC 25 SE ½; 5900'	and my orders have a management and a section of	ar a sa a	The second secon

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Name	Status	Habitat Information	Economic Importance
Spiranthes romanzoffiana	uncommon	Moist woods near beaverpond; with Pinus	Scenic.
Cham.		contorta, Pyrola asarifolia, Pyrola	
Framont, ID; T12N R44E		secunda, and Galium boreale; reported	•
SEC 29 NW ¼; 6300'	•	from elsewhere in the area, may be	
		more common than indicated.	
OROBANCHACEAE			***************************************
	•		
Orobanche fasciculata	uncommon	On roots of Artemisia ludoviciana in	Edible for humans.
Nutt.	•	deep soil at base of south facing rock	÷ .
Fremont, ID; T11N R45E		outcropping; with Symphoricarpos	
. SEC 7 SE 坛; 7000'	,	oreophilus, Carex geyeri, and Prunus	
		virginiana.	•
	·		•
Orobanche uniflora L.	common	On roots of Delphinium nuttallianum (and	Same as above.
Fremont, ID; T15N R44E		on other roots as well in other locations)	
SEC 15 NW 4; 8000'	•	in rocky soil on open northwest facing	
		slope; with Artemisia tridentata,	
	•	Antennaria corymbosa, and Astragalus	
		alpinus.	•
•			
. ,			
PAEONIACEAE			
Paeonia brownii Dougl.	common	Open woods often in rocky areas or along	Scenic.
Fremont, ID; T11N R42E		streams; with Symphoricarpos oreophilus,	
SEC 23 NE 4; 6100'		Pinus contorta, and Poa pratensis.	
			*
PINACEAE			
Abies lasiocarpa (Hook.)	common	Throughout area at mid to higher	Firewood; game cover and
Nutt.		elevations; usually on sloping ground,	winter moose browse.
Fremont, ID; T10N R45E	*	but also in moist areas along streams	
		and rivers; with Pinus contorta,	
SEC 26 NW 4; 6200'		Pseudotsuga menziesii, and Populus	
	· • • • • • • • • • • • • • • • • • • •	tremuloides; or with Pinus contorta,	
		Picea engelmanii, and Pinus albicaulis;	,
		a climax dominant for much of the area	
		but seldom reaching this condition due	
		to the prevalence of Pinus contorta.	

Name	Status	Habitat Information	Known Economic Importance
Picea engelmannii Parry Gallatin, MT; T14S R4E SEC 22 NW ½; 7600'	common	Moist areas along streams and in subalpine basins and saddles; found with Pinus contorta, Abies lasiocarpa and with Pseudotsuga menziesii. Associated	Important lumbering tree; important wildlife cover and food source.
		understory species include <u>Veronica</u> wormskjoldii, <u>Ribes lacustre</u> , <u>Rorippa</u> nasturtium-aquaticum, <u>Streptopus</u> amplexifolius, and <u>Equisetum</u> arvense.	
Pinus contorta Dougl.	abundant	Widespread; the visually dominant plant	The most important lumbering
Teton, WY; T47N R118W SEC 1 SW ½; 6550'		in the study area; often replaced by other conifers on cool moist sloping ground and at high elevations (Mt. Two Top), replaced by Populus tremuloides	tree in the area; game cover and food source; firewood.
		on rocky outcroppings and old lava flows. Occurs with all other conifers. Understory associates include Arnica cordifolia, Carex geyeri, Vaccinium scoparium, Sorbus	
Pinus flexilis James	common	scopulina, and Prunus virginiana. Dry, barren rocky outcroppings at lower elevations, to exposed slopes at moderate	Game cover and food source.
Fremont, ID; T10N R45E SEC 26 NW ½; 6200'		elevations; with Chrysopsis villosa, Cirsium canovirens, and Chaenactis douglasii; or with Pinus contorta, Lonicera utahensis, and Abies lasciocarpa.	÷

Name	Status	Habitat Information	Known Econimic Importance
Pseudotsuga menziesii (Mirbel) Franco Teton, WY; T47N R118W SEC 1 SW 4; 6600'	common	Scattered in pine woods throughout the area and reaching dominance on moist, usually south and west-facing canyon and mountainsides; found with Pinus contorta, Abies lasiocarpa, and Picea engelmanii.	Though not well developed here, this is the most important lumbering tree in North America; also utilized as habitat by
		Understory, associates include Rubus parviflorus, Vaccinium globulare, and Sambucus cerulea.	wildlife.
PLANTAGINACEAE			
Plantago major L. Fremont, ID; T8N R45E SEC 6 NW 4; 5950'	common	Roadsides and waste areas, with Lepidium virginicum, Verbascum thapsus, and Trifolum repens.	Weed; edible for humans.
POACEAE			
Agropyron caninum (L.) Beauv. Fremont, ID; T11N R45E SEC 9 SW 4; 7200'	common to abundant	Widespread; roadsides, meadows, clearcuts and sagebrush flats; with Agrostis Scabra, Solidago nana and Carex douglasii; or with Poa palustris, Geranium viscosissimum and Helianthella uniflora; or with Artemisia tridentata, Festuca idahoensis and Chrysothamnus viscidiflorus.	The following information applies generally to grasses High value for livestock grazing; elk forage; spring deer forage; excellent erosion control and soil builder; seeds are an important food source for numerous small game and birds.
Agropyron cristatum (L.) Gaertn. Fremont, ID; T8N R45E SEC 6 NW 4; 5900'	common	Dry meadows, wood margins, and roadsides; with Agropyron caninum, Verbascum thapsus, and Dactylis glomerata.	Same as above (widely introduced by federal agencies).

<u>Name</u>	Status	Habitat Information	Known Economic Importance
Agropyron dasystachyum (Hook.) Scribn. (Fremont, ID; T9N R44E SEC 4 SE 4; 5600'	unknown	In moist streambank meadow under scattered pines; with Pinus contorta, Elymus glaucus, Poa nevadensis, Calamagrostis neglecta, Bromus carinatus, and Deschampsia elongata; found in only one location.	Same as above.
Agropyron repens (L.) Beauv. Fremont, ID; T8N R45E SEC 6 NW 1/2; 5900'	common	Disturbed areas and roadsides; with Agropyron cristatum, Dactylis glomerata, and Stipa occidentalis.	Same as above (but a noxious weed).
Agropyron spicatum (pursh) Scribn. Gallatin, MT; T14S R5E SEC 19 NE 4; 6800'	common	Dry to moist meadows, open hillsides and sagebrush flats; with <u>Crepis acuminata</u> ; or with <u>Festuca idahoensis</u> , <u>Besseya wyomingensis</u> , <u>Phacelia sericea</u> and <u>Artemisia tridentata</u> .	Same as above.
Agrostis alba L. Fremont, ID; T8N R45E SEC 11 SW 4; 6200'	unknown	Open moist carex meadow; with <u>Carex</u> microptera, <u>Carex nebraskensis</u> , and <u>Trifolium pratense</u> ; found only in one location.	Same as above.
Agrostis exarata Trin. Fremont, ID; T14N R44E SEC 16 NE ½; 6400'	common	Moist clearcuts to open woods; with Arnica cordifolia, Madia glomerata, Populus tremuloides, and Phleum pratense.	Same as above.
Agrostis humilis Vasey Fremont, ID; T11N R45E SEC 9 SW 1/2; 7200'	unknown	Bare areas in subalpine meadow along south Partridge Creek; with Agrostis scabra, Agrostis idahoensis, Solidago	Same as above (minor).
		nana, and Melilotus officinale; probably common, but found only in one location.	

Name	Status	Habitat Information	Known Econimic Importance
Agrostis idahoensis Nash Fremont, ID; TllN R45E SEC 9 SW 4; 7200'	common	Margins of streams and dry stream beds at higher elevations; with <u>Ivesia</u> gordonli, <u>Agrostis scabra</u> , and <u>Salix</u> spp.	Same as above (minor).
Agrostis scabra Willd. Fremont, ID; Tlln R45E SEC 9 SW 1/2; 7200'	common to abundant	Clearcuts, roadsides, and bare open areas in meadows and along streams; with Solidago nana, Agropyron caninum,	Same as above.
		Agrostis humilis and Melilotus officinale; or with Gayophytum diffusum, Anaphalis margaritacea and Lupinus argenteus.	
Agrostis tenuis Sibth. Fremont, ID; Tl3N R43E	common	Roadsides, clear cuts and bare areas along streams; with Aster occidentalis,	Same as above.
SEC 14 SW 4; 6290'		Salix spp., and Carex spp.; or with Bromus carinatus, Solidago canadensis, and Bromus tectorum.	
Agrostis variabilis Rydb.	common	Moist rocky areas and along streams at	Same as above (minor).
Fremont, ID; T15N R44E		higher elevations; with Woodsia scopulina,	
SEC 16 SE 4; 8650'		Valeriana acutiloba, and Rubus idaeus;	
•		or with Agrostis idahoensis, Viola	
		palustris, and Salix spp.	
A7		N-1-4- h	
Alopecurus aequalis Sobol.	common	Moist to wet areas at margins of lakes,	Same as above.
Fremont, ID; TllN R42E		streams and stockponds. Two forms:	
SEC 7 NW 4; 6400'		decumbent and nodally rooting form	
		growing in shallow water; tufted form	
•		growing on banks above water; with	
		Glyceria borealis, Sagittaria cuneata	
		and <u>Utricularia</u> <u>vulgaris</u> ; or with	
		Oenothera tanacetifolia, Rorippa	
	•	curvisiliqua and Spergularia rubra.	

Name	Status	Habitat Information	Known Economic Importance
Alopecurus alpinus J.E. Smith Fremont, ID; T14N R44E SEC 20 SW 4; 6400'	common	Moist to wet meadows, clearings, and margins of marshes and streams; with Carex aquatilis, Pinus contorta, and Senecio triangularis; or with Stipa occidentalis, Sisyrinchium angustifolium and Ranunculus natans.	Same as above.
Eromus carinatus Hook & Arn. Fremont, ID; T14N R44E SEC 20 SW 1/2; 6400'	abundant	Widespread; meadows, roadsides, open streambanks and woods; often forming dense sods infavorable habitats; with Festuca idahoensis, Stipa occidentalis, Agropyron spp. and Senecio integerrimus; or with Aster integrifolius, Solidago missouriensis, and Bromus tectorum.	Same as above (major)
Bromus tectorum L. Teton, WY; T47N R118W SEC 1 SW 4; 6550'	common	Disturbed areas along roads, streambanks and dry meadows; not particularly common above the Snake River Plain, possibly reflecting the generally good condition of meadow habitats within the National Forest; with Artemisia tridentata, Chrysothamnus nauseosus, and Linum perenne; or with Madia glomerata, Bromus carinatus and Solidago missouriensis.	Same as above—except only useful in early spring, after which it becomes harmful to grazing livestock; indicator of overused range.
Calamagrostis canadensis (Michx.) Beauv. Fremont, ID; T11N R45E SEC 9 SW 4; 7200'	common	Streambeds and banks in moist to wet soil in open to (more often) shady locations; with Pinus contorta, Vaccinium caespitosum and Vaccinium scoparium; or with Picea engelmanii, Elymus glaucus and Caltha leptosepala.	Same as above (general grass information).

Name	Status	Habitat Information	Known Economic Importance
Calamagrostis neglecta (Ehrh.) G. M. & S. Fremont, ID; T13N R43E SEC 14 SW 坛; 6290'	unknown	Open streambanks at waters edge; with Carex aquatilis, Carex simulata and Glyceria grandis; found at only one location, but probably common.	Same as above.
Calamagrostis rubescens Buckl. Fremont, ID; T11N R42E SEC 1 NW 坛; 6400'	abundant	Widespreadh; the main grass in woodlands in the study area, often growing densely under the pines; with Pinus contorta, Poa pratensis, Lonicera utahensis, and Calochortus nuttallii.	Same as above; important habitat type indicator species.
Cinna latifolia (Trevir.) Griseb. Fremont, ID; T15N R44E SEC 15 SW ½; 8000'	unknown	In water of brook at margin of clearcut; with <u>Picea engelmanii</u> , <u>Parnassia</u> fimbriata, and <u>Calamagrostis</u> canadensis.	Same as above.
Dactylis glomerata L. Fremont, ID; T8N R45E SEC 6 NW 4; 5900'	common	Moist open woods and meadows; with Stipa occidentalis, Pinus contorta, and Elymus glaucus.	Same as above.
Danthonia californica Boland. Fremont, ID; T14N R44E SEC 20 SW 1/2; 6400'	common	Moist meadows to marshes; with <u>Carex</u> aquatilis, <u>Carex lanuginosa</u> , and <u>Habenaria dilatata</u> ; or with <u>Poa</u> palustris, <u>Melica spectabilis</u> , and <u>Geranium viscosissimum</u> .	Same as above.
Danthonia intermedia Vasey Fremont, ID; T14N R44E SEC 20 SW 4; 6400'	common	Moist meadows; with <u>Stipa occidentalis</u> , <u>Melica spectabilis and Festuca idahoensis</u> ; or with <u>Carex brunnesceus</u> , <u>Trisetum woolfii</u> and <u>Sitanion hystrix</u> .	Same as above.
Danthonia unispicata (Thurb.) Munro Fremont, ID; T14N R44E - SEC 17 NE 2; 6400'	common	Moist to dry areas in Henry's Lake flats; with Campanula rotundifolia, Carex muricata and Festuca idahoensis.	Same as above.
Deschampsia cespitosa (L.) Beauv. Fremont, ID; T14N R44E SEC 20 SW ½; 6400'	common	Moist to wet meadows and roadsides; with Alopecurus alpinus, Senecio triangularis and Juncus ensifolius.	Same as above.

Name	Status	Habitat Information	Known Economic Importance
Deschampsia elongata (Hook.) Munro Fremont, ID; T9N R44E SEC 4 SE 坛; 5600'	unknown	Moist grassy meadow along Fish Creek under scattered pines; with Pinus contorta, Stipa occidentalis and Elymus glaucus; found in only one location; probably common.	Same as above.
Elymus glaucus Buckl. Fremont, ID; TSN R45 E SEC 6 NW 1; 5900'	common	Moist to wet open woods and adjacent meadows; with Pinus contorta, Poa palustris, Dactylis glomerata, and Agropyron cristatum; or with Picea engelmanii, Caltha leptosepala and Habenaria dilatata.	Same as above.
Festuca idahoensis Elmer Fremont, ID; T14N R44E SEC 20 SW 4; 6400'	abundant	Widespread in dry to moist meadows and along roadsides at all elevations; with Poa pratensis, Stipa occidentalis, and Helianthella uniflora; or with Artemisia tridentata, Bromus carinatus and Linum perenne; or with Artemisia tridentata, Phacelia sericea and Pinus albicaulis.	Same as above (major).
Festuca subulata Trin Fremont, ID; T9N R42E SEC 11 NE 4; 5200'	common	Moist open woods and scrubby areas; with Acer glabrum, Acer grandidentatum, and Pscudotsuga menziesii; or with Pseudotsuga menziesii, Rosa woodsii, and Aster conspicuus.	Same as above.
Glyceria borealis (Nash) Teton, WY; T47N R118W. SEC 16 SW 1; 6500'	unknown	Shallow water at edge of Ernest Lake; with Alopecurus aequalis, Utricularia yulgaris, and Carex aquatilis; found at only one location, but probably common.	Same as above.

				Known
]	Name	Status	Habitat Information	Economic Importance
	Glyceria grandis Wats. Fremont, ID; T9N R44E SEC 3 SE 4; 5500	common	Standing to flowing water in and along streams; with Rorippa nasturtium-aquaticum, Calium trifidum, and Urtica dioica; or with Carex stipata, Juncus tenuls, and Juncus ensifolius.	Same as above.
	Hierochloe odorata (L.) Beauv. Fremont, ID; T9N R43E SEC 12 SE 4; 5200'	common	Marshes and wet ground along streams; with <u>Carex spp.</u> , <u>Galium bifolium</u> and <u>Floerkia proserpinacoides</u> .	Same as above.
٠	Nevski Fremont, ID; T14N R44E SEC 20 SW 4; 6400'	common	Moist roadsides, meadows and grassy streambanks; with Festuca idahoensis, Eromus carinatus, and Potentilla gracilis.	Same as above.
*	Hordeum jubatum L. Fremont, ID; T8N R45E SEC 6 NV 4; 5900'	common	Dry roadsides at lower elevations; with Plantago major, Verbascum thapsus, and Linaria vulgaris.	Same as above.
.	Koeleria cristata Pers: Fremont, ID; T14N R44E SEC 20 SW 坛; 6400'	common	Moist meadows and roadsides; with Festuca idahoensis, Melica spectabilis and Poa pratensis; or with Agrostis scabra, Agrostis humilis, Agropyron caninum, and Carex brunnescens.	Same as above.
•	Melica spectabilis Scribn. Fremont, ID; TlON R43E SEC 8 SE 4; 6100'	common	Moist clearings, meadows, and streambanks; with Pinus contorta, Lupinus argenteus and Geranium viscosissimum; or with Festuca idahoensis, Koeleria cristata, and Poa pratensis.	Same as above.
	Muhlenbergia filiformis (Thurb.) Rydb. Fremont, ID; T10N R45E SEC 26 SW 1; 6500	unknown	Moist woodland roadside; with <u>Pinus</u> contorta, <u>Apocynum androsaemafolium</u> , and <u>Aster engelmannii</u> ; found at only one location	Same as above.

Name	Status	Habitat Information	Known Economic Importance
Oryzopsis exigua Thurb. Fremont, ID; T13N R45E SEC 1 NW 4; 7800'	rare	Moist open rocky embankment above dry bed of Thirsty Creek in upper Black Canyon; with Solidago nana; found at only one location.	Same as above (minor).
Phalaris arundinacea L. Fremont, ID; T12N R44E SEC 29 NW 1/4; 6400'	•	Emergent in beaver ponds along the Warm River; with Juncus ensifolius, Salix spp. and Solidago canadensis.	Same as above.
Phleum alpinum L. Fremont, ID; T14N R44E SEC 20 SW 坛; 6400'	common	Moist open woods, meadows, and clearcuts with <u>Poa pratensis</u> , <u>Phleum pratense</u> and <u>Festuca idahoensis</u> .	Same as above.
Phleum pratense L. Fremont, ID; T14N R44E SEC 20 12; 6400'	common	Moist open woods and meadows; with Festuca idahoensis, Melica spectabilis, and Potentilla gracilis.	Same as above.
Pos léptocoma Trin. Fremont, ID; T12N R44E SEC 29 NW 4; 6300'	unknown	Wet roadside auto pullout adjacent to Warm River beaverponds; with Betula glandulosa, Agrostis scabra, Pinus contorta and Salix spp.; found only at one location.	Same as above (minor).
Poa nervosa (Hook.) Vasey Fremont, ID; T10N R42E SEC 15 NE 坛; 6200	common	Moist open woods and meadows; with Carex hoodii, Carex raynoldsii, and Delphinium nuttallianum.	Same as above.
Fremont, ID; T9N R44E SEC 4 SE 2; 5000	unknown	Moist open woods; with Pinus contorta, Antennaria microphylia, and Thalictrum occidentale; found only at one location, but probably common.	Same as above.
Foe palustris L. Fremont, ID; T8N R45E SEC 6 NW 4; 5900'	common	Clearclearcuts, meadows and roadsides, to adjacent open woods; with Agrostis exarata, Arnica Cordifolia, and Phleum pratense.	Same as above.

	•		Known
Name	Status	Habitat Information	Economic Importance
Poa pratensis L. Fremont, ID; T14N R44E	common to abundant	Widespread; moist meadows, clearcuts and clearings to sagebrush flats; with	Same as above.
SEC 20 SW 4; 6400'	•	Stipa occidentalis, Festuca idahoensis, and Geranium viscosissimum; or with	
•		Artemisia tridentata, Artemisia arbuscula	,
		and Machaeranthera canescens.	
Poa reflexa Vasey &	common	Cool, moist, open woods and adjacent	Same as above.
Scribn. Gallatin, MT; T14S R4E		clearcuts; with <u>Mimulus lewesii</u> , <u>Gayophytum diffusum</u> , <u>Agoseris</u>	
SEC 23 NE 1/2; 7400'		aurantiaca, and Epilobium alpinum;	
2	•	or with Abies lasiocarpa, Pinus albicaulis, Festuca idahoensis, and	
		Stipa pinetorum.	*
Poa scabrella (Thurb.)	common	Gravelly roadsides; with Phacelia	Same as above.
Benth. '	· · ·	hastata, Lepidium virginicum, and Spergularia rubra.	•
Fremont, ID; T14N R44E SIC 20 SW %; 6400'		spergularia rubra.	
Citatian huntuda (Nutt.)	unknown	Manaina of autologica manders along C	Same as above.
Sitanion hystrix (Nutt.) Smith	unknown	Margins of subalpine meadow along S. Partridge Creek; with Calamagrostis	same as above,
Fremont, ID; T11N R45E	:	canadensis, Pinus contorta, and	
SEC 9 SW 4; 7200'	•	Trisetum woolfii; found in only one location but probably common.	
Stipa comata	common	Dry brush communities south of the National	Same as above.
Trin. & Rupr. Fremont, ID; T10N R42E		forest boundary along the Snake River; with Symphoricarpos oreophilus, Artemisia	
SEC 20 SW 4; 5600'		tridentata, Hieracium cynoglossoides and	
		Koeleria cristata.	
Stipa occidentalis Thurb.	common to	•	Same as above.
Fremont, ID; T10N R43E 'SEC 8 SE 1/2; 6100'	abundant	woods; with <u>Poa pratensis</u> , <u>Melica</u> spectabilis, Geranium viscosissimum,	•
5EC 6 3E 2, 0100		and Hackelia micrantha.	

			Known
Name	Status	Habitat Information	Economic Importance
Stipa pinetorum Jones Fremont, ID; T15N R44E SEC 16 SE 1/4; 8700	common	Bare areas in moist to dry meadows, clearcuts and subalpine parkland; with Artemisia tridentata, Cryptantha torreyana, and Carex deweyana; or with Abies Lasiccarpa, Pinus albicaulis, and Phacelia sericea.	Same as above.
Trisetum spicatum (L.) Richter Fremont, ID; T14N R44E SEC 20 SW 4;	common	Moist open meadows; also occasional on boulders along dry wooded subalpine streambeds; with Festuca idahoensis, Poa pratensis, and Geranium viscosissimum; or with Trisetum woolfii, Veronica wormskjoldii, and Carex brunnescens.	Same as above.
Trisetum wolfii Vasey Fremont, ID; Tlln R45E SEC 9 SW 1/4;	uncommon	Open woods and streambank boulders along dry subalpine streambeds; with Vaccinium scoparium, Veronica wormskjoldii and Carex brunnescens.	Same as above (minor).
POLEMONIACEAE			
Fremont, ID; T10N R43E SEC 17 NE 2; 5800	abundant	Widespread in bare open areas; with Cryptantha torreyana, Gayophytum diffusum, Linanthus septentrionalis, and Lupinus argenteus.	
Gilia aggregata (Pursh.) Spreng. Fremont, ID; T9N R42E SEC 1 SW 4; 5400'	common	Bare dry hillsides and roadbanks; alone or with Apocynum androsaenafolium, Artemisia tridentata and Bromus carinatus.	Scenic, some forage value.
Leptodactylon pungens (Torr.) Nutt. Fremont, ID; T11N R42E SEC 1 NW 4; 6400'	uncommon	Dry rocky areas in open heavily grazed sagebrush flat; with Arenaria congesta, Eriogonum umbellatum, and Penstemon cyaneus.	

•			Known
Name	Status	Habitat Information	Economic Importance
Linanthus septentrionalis Mason Fremont, ID; T10N R42E SEC 13 NW 1; 6160'	, common	Habitat similar to that of Collomia linearis; with Collomia linearis, Cryptantha torreyana, and Cayophytum diffusum.	Scenic.
Microsteris gracilis (Hook.) Greene Fremont, ID; T9N R42E SEC 13 NW 4; 5200'	common	Open ground usually with sagebrush; with Collinsia parviflora, Artemisia tridentata, Nemophila breviflora, and Delphinium nuttallianum.	
Phlox multiflora A. Nels. Fremont, ID; T15N R44E SEC 16 SE 4; 8700'	common	Dry sagebrush flats and hillsides; also scattered in dry subalpine streambeds; with Artemisia tridentata, Chrysothamnus nauseosus, and Poaceae spp.; or with Phacelia sericea, Eriogonum umbellatum and Sedum lanceolatum; or with Pinus contorta, Dodecatheon pulchellum and Aster alpigenus.	Scenic, soil binder.
Phlox longifolia Nutt. Fremont, ID; T8N R44E SEC 21 NE 1/4; 6000'	common	Open south facing brushy hillsides; with Symphoricarpos oreophilus, Purshia tridentata, Artemisia tridentata, Comandra umbellata, and Lupinus sericeus.	Very scenic.

Name	Status	Habitat Information	Known Economic Importance
POLYGONACEAE			
Fremont, ID; T11N R45E SEC 9 SW 4; 7200	uncommon	Open rocky areas along dry subalpine streambeds; with <u>Carex douglasii</u> , <u>Solidago mana and Ivesia gordonii</u> ; found only at on location, possibly more common than indicated.	Forage value for wildlife.
Eriogonum heracleoides Nutt. Fremont, ID; T14N R44E SEC 20 SW 4; 6400'	common	Sagebrush flats; with Artemisia tridentata, Agoseris glauca, Eriophyllum lanatum and Castilleja longispica.	Forage value for wildlife.
Fremont, ID; T15N R44E SEC 16 SE 1/4; 8700	common	Two forms: Dwarf plants with compact headlike inflorescences at summit of Mt. Two Top; with Phacelia sericea,	Forage value for wildlife.
		Pinus albicaulis, Penstemon procerus, and Artemisia tridentata; or more well developed plants with open inflorescences in sagebrush flats; with Artemisia tridentata, Eriogonum heracleoides, Eriophyllum lanatum and Castilleja longispica.	
Polygonum aviculare L. Fremont, ID; T8N R45E SEC 6 NW ½; 5950'	common	Hard bare disturbed areas; with Plantago major, Lepidium virginicum and Orthocarpus luteus.	Heavily utilized by small birds.
Polygonum bistortoides Pursh. Fremont, ID; T12N R45E SEC 23 SW 4; 7750'	common	Open marshy areas to subalpine meadows and dry streambeds with Rumex paucifolius, Pedicularis groenlandica, Sibbaldia procumbens and Spraguea umbellata.	Eaten by man; forage for wild animals.

Name	Status	Habitat Information	Known Economic Importance
Polygonum confertifolium Nutt. Fremont, ID; T12N R43E SEC 32 SE 4; 6400'	unknown	Edge of Carex bog on wet ground; with Carex rostrata, Orobanche uniflora, Juncus bufonis, and Mimulus breviflorus.	
Polygonum douglasii Greene Fremont, ID; T14N R44E ** SEC 20 SW 4; 6400'	common to abundant	Moist to dry meadows and clearcuts, and along roads; with Collomia linearis, Cryptantha torreyana, and Gayophytum diffusum.	Constitutes an important portion of the diet of sage grouse and other birds as well as big game animals and domestic livestock inspite of its small size.
Polygonum persicaria L. Fremont, ID; T10N R45 E SEC 26 SE 4; 6500'	Unknown	Shore of Horseshoe Lake; with Carex lenticularis, Ranunculus flammula, and Cyperus aristatus; found only at one location.	Weed, utilized by waterfowl.
Rumex acetosella L. Fremont, ID; T12N R43E SEC 1 SW 4; 6300	common	Dry bare roadsides; with Artemisia tridentata and Cryptantha torrayana.	Good in salads, browsed by game animals.
Rumex crispus L. Teton, WY; T47N R118W SEC 16 SW 4; 6500'	common	Moist open areas usually near water; with Carex aquatilis, Mentha arvensis and Madia glomerata.	Good in salads and as a pot herb. Browsed by large mammals.
Rumex paucifolius Fremont, ID; T10N R43E SEC 8 SE 1/2; 5900'	common	Widespread in moist areas; open woods, meadows, subalpine streambanks and clearcuts; with Pinus contorta, Antennaria microphylla, and Arnica cordifolia; or with Polygonum bistortoides, Pedicularis groenlandica, Sibbaldia procumbens and Spraguea umbellata; or with Castilleia cusickii, Penstemon procerus, and Carex aquatilis.	Good in salads. Browsed by mammals and birds.

Name	Status	Habitat Information	Known Economic Importance
Rumex salicifolius Weinm. Gallatin, MT; T14S R5E SEC 18 SE 1/4; 6800'	uncommon	Margins of ponds and streams in open areas; with Carex raynoldsil, Stellaria longipes, and Clematis hirsutissima; or with Polygonum natans.	Good in salads. Provides some forage.
POLYPODIACEAE			
Athryium felix-femina (L.) Roth. Fremont, ID; T14N R44E SEC 23 SW/2; 7000'	uncommon	Wet shady areas along Thirsty Creek in Tower Black Canyon; with <u>Pseudotsuga</u> menziesii, <u>Rubus parviflorus</u> and <u>Pteridium aquilinum</u> .	Young fronds can be eaten by man.
Cryptogramma crispa (L.) R. Br. Fremont, ID; T14N R44E SEC 23 SW 4; 7000'	uncommon	Boulder field on north facing side of lower Black Canyon with Rubus idaeus, Erigeron acris and Cystopteris fragilis.	
Cystopteris fragilis (L.) Bernh. Fremont, ID; T10N R43E SEC 8 SE 1; 6000'	common	Shady rockslides and cliff crevices; with Clematis columbiana, Dodecatheon pulchellum and Fritillaria atropurpurea; or with Erigeron acris and Ribes lacustre.	
Pteridium aquilinum (L.) Kuhn. Fremont, ID; T9N R42E SEC 11 NE 2; 5250	common	Shaded to open hillsides—usually associated with springs; with Prunus virginiana, Ribes aureum and Conyza canadensis; or with Pseudotsuga menziesii, Rubus parviflorus, and Sorbus scopulina.	Young fiddleheads edible for humans.
Woodsia scopulina D.C. Eat. Fremont, ID; T12N R43E SEC 3 NW 1/4; 6300'	common	Shaded rockslides and cliff crevices; with Populus tremuloides and Rubus idaeus.	

Name	Status	Habitat Information	Known Economic Importance
PORTULACACEAE			
Claytonia lanceolata Pursh Fremont, ID; T12N R41E SEC 11 SW 1/4; 6400'	very common	Widespread in open woods, sagebrush flats, aspen groves and along streams; with Fritillaria pudica, Nemophila breviflora, Collinsia parviflora and Erythronium grandiflorum. Claytonia flava is now Claytonia lanceolata var. flava. I found only C. lanceolata var. Lanceolata.	Scenic; favored by grizzly bears; entire plant edible for humans.
Lewisia pygmaea (Gray) Robins. Fremont, ID; T15N R44E SEC 16 SE ½; 8600'	uncommon	Snowbank areas on north side of Mt. Two Top; with Oxyria digyna, Androsace septentrionalis and Erythronium grandiflorum; also occassional in subalpine dry streambeds.	Roots edible for humans.
Montia chamissoi (ledeb.) Robins. and Fern. Fremont, ID; T11N R42E SEC 7 NW 4; 6400'	uncommon	Wet shaded areas around springs; with Populus tremuloides, Salix spp., Equisetum arvense, and Geranium richardsonii; found only at one location.	Leaves and shoots utilized by man. Forage for native animals and livestock.
Spraguea umbellata Torr. Fremont, ID; T12N R45E SEC 23 SW ½; 7750' POTAMOGETONACEAE	common	Bare roadsides and streambanks at higher elevations; with Polygonum bistortoides, Rumex paucifolius and Pedicularis groenlandica.	Scenic.
Potamogeton alpinus Balbis Teton, WY; T47N R118W SEC 16 SW 4; 6500'	common to abundant	Shallow lakes and beaver ponds; with Potamogeton spp., Myriophyllum spicatum and Nuphar polysepalum.	Important for waterfowl forage and is one of the basic producers for the aquatic food web.
Potamogeton berchtoldii Fieb. Teton, WY; T47N R118W SEC 16 SW 4; 6500'	common	Shallow lakes; with <u>Potamogeton</u> spp. Myriophyllum spicatum, <u>Nuphar polysepalum</u> , <u>Utricularia vulgaris</u> , <u>Lemna minor</u> , <u>Spirodela polyrhiza</u> , <u>Sparganium emersum</u> and <u>Sagittaria cuneata</u> .	Same as above.

	•		Known
Name	Status	Habitat Information	Economic Importance
Potamogeton epihydrus Raf. Teton, WY; T47N R118W SEC 16 SW ½; 6500'	common	Same as above.	Same as above.
Pers. Fremont, WY; T13N R43E SEC 14 SW ½; 6300'	Coinmon	Flowing water in Elk Creek and Buffalo River; with Clyceria grandis, Ranunculus aquatilis, vulgaris, and Myriophyllum spicatum.	Same as above.
Potamogeton natans L. Teton, WY; T47N R118W SEC 16 SW 1/4; 6500'	common	Same as other lake dwelling potamogetons.	Same as above.
Potamogeton obtusifolius Mert. & Koch. Teton, WY; T47N R118W SEC 16 SN%; 6500'	unknown	Same as above. This species has not been reported from the Northwest except from Vancouver Island and needs further verification.	Same as above.
PRIMULACEAE			
Androsace filiformis Retz. Fremont, ID; T11N R42E SEC 7 NW 4; 6400	common	Moist shady meadows and streambanks; with Barbarca orthoceras, Draba stenoloba, Valeriana occidentalis, and Osmorhiza occidentalis.	Scenic.
Androsace septentrionalis E. Fremont, ID; T15N R44E SEC 20 NW ½; 8600'	uncommon	Bare snow bank areas on Mt. Two Top; with Oxyria digyna, Lewesii pygmaea, and Ranunculus eschscholtzii.	Scenic.
Dodecatheon conjugens Greene Fremont, ID; T12N R42E SEC 36 SW ½; 6100'	common		Scenic; favored by grizzly bears.

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Name	Status .	Habitat Information	Economic Importance

. Dodecatheon pulchellum	common	Moist meadows and rock crevices usually	Very scenic; favored
(Raf.) Merrill		along streams and rivers; with Clematis	by grizzly bears.
Fremont, ID; T10N R43E	•	columbiana, Geum triflorum, Rumex	
SEC 8 SE 1; 5900'		paucifolius and Cystopteris fragilis; or	
•		with Viola adunca, Veronica wormskjoldii,	
		Trollius laxus and Spraguea umbellata.	
·	, · .	Consideration of the Constitution of the Const	:
RANUNCULACEAE	•		
·.			
Aconitum columbianum	.common	Moist streambanks; with Mertensia	Very scenic. Is toxic
Nute.		ciliata, Senecio triangularis, and	to domestic animals,
Gallatin, MT; T15S R5E		Carex hoodii.	expecially sheep.
SEC 18 SE 1; 6750'		The state of the s	
Actaea rubra (Ait.) Willd.	common	Streambanks; with Alnus incana, Betula	Poisonous to humans:
Fremont, ID; T10N R43E		glandulosa and Clematis columbiana.	•
SEC 8 SE 4; 5900'		Silvangere estampares estampares particular	,
Aquilegia flavescens Wats.	common	Open areas from meadows, rock slides	Very scenic.
Gallatin, MT; T14S R4E	Common	and clearcuts to rock crevices at the	Taly occurs.
SEC 23 NE 4; 7400'		south summit of Mt. Two Top; with	
	,	Cayophytum diffusum, Agoseris glauca	
• .		and symphoricarpos oreophilus; or with	
		Rubus idaeus, Valeriana acutiloba and	
		Phacelia sericea.	
	political contraction of the demonstration of the terms of	the state of the s	
Aquilegia formosa Fisch.	common	On south facing rocky outcroppings and	Very scenic.
Fremont, ID; T12N R45E		scree slopes along the canyons which	
SEC 4 NW 4; 7500'		drain the Madison Plateau, where it	
		intergrades with A. flavescens; with	
		A. flavescens, Poa nervosa, and	
		Potentilla glandulosa.	
,		Control of the contro	
Caltha leptosepala D.C.	uncommon	In wet shady woods on north side of Mt.	Scenic.
Fremont, ID; T15N R44E	•	Two Top; with Picea Engelmanii,	
SEC 15 NE 4; 7800'		Ranunculus alismaefolius, and Streptopus	
		amplexifolius.	
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Name	Status	Habitat Information	Known Economic Importance
Clematis columbiana (Nutt.) T.& G Fremont, ID; T10N R43E SEC 8 SE ½; 5900'	common	Rock outcroppings and cliffs along Snake River; with Pinus contorta, Actaea rubra, Dodecatheon pulchellum and Cystopteris fragilis.	Very Scenic.
Clematis Hirsutissima Pursh Gallatin, MT; T145 R5E SEC 19 NE 4; 6800'	common	Rocky streambank meadows; also near the summit of Mt. Two Top; with Carex raynoldsii, Rumex salicifolius and Potentilla diversifolia.	Very scenic.
Delphinium burkei Greene Fremont, ID; T8N R45E SEC 11 SW 1/2; 6200'	uncommon	Moist open meadows with <u>Carex microptera</u> <u>Carex nebraskensis</u> , and <u>Cirsium scariosum</u> .	Scenic. Poisonous to domestic livestock, particularly sheep.
Delphinium nuttallianum Pritz. Fremont, ID; T10N R42E SEC 15 NE ½; 6200'	common to abundant	Widespread in open areas; with <u>Carex</u> <u>hoodii</u> , <u>Carex raynoldsii</u> and <u>Antennaria</u> <u>microphylla</u> ; or with <u>Brodiaea douglasii</u> , <u>Artemisia tridentata</u> and <u>Purshia tridentata</u>	Scenic. Poisonous to domestic livestock, particularly sheep.
Dèlphinium occidentale Wats. Fremont, ID; T15N R44E SEC 22 NE 14; 8200'	common	Moist open to shady areas usually near water; with Symphoricarpos oreophilus Allium brevistylum and Populus trichocarpa; or with Festuca idahoensis, Artemisia tridentata and Picea engelmannii.	Scenic. Same as above.
Myosurus aristatus Benth Fremont, ID; T10N R44E SEC 16 SE 4; 5800'	unknown	In and around edges of drying vernal pools; with <u>Plagiobothrys scouleri</u> , <u>Wyethia</u> <u>helianthoides</u> , and <u>Ranunculus flammula</u> .	
Ranunculus acriformis Gray Fremont, ID; T8N R45E SEC 11 S ½; 6200'	unknown	Wet ground in meadows; with <u>Carex</u> <u>microptera</u> , <u>Senecio foetidus</u> , <u>Sisyrhincium angustifolium</u> , and <u>Camassia</u> <u>quamash</u> .	

	•		Known
Name	Status .	Habitat Information	Economic Importance
Ranunculus alismaefolius Geyer Fremont, ID; T15N R44E SEC 15 NE 4; 7800'	common	Wet open to shady banks of sub-alpine brooks; with Picea engelmannii, Caltha leptosepala, and Streptopus amplexifolius; or with Pinus contorta, Dodcatheon pulchell Trollius Laxus and Viola adunca.	um,
Ranunculus aquatilis L. Teton, WY; T47N R118W SEC 2 NW 4; 6500'	common	Flowing water in streams, and mudflats around drying vernal pools; with <u>Carex aquatilis</u> , <u>Lemma trisulca</u> and <u>Salix spp.</u> ; or with <u>Sium suave</u> , <u>Ranunculus flammula</u> and <u>Downingia elegans</u> .	Important producer in aquatic food web.
Fremont, ID; T10N R45E SEC 26 SE 4; 6500'	common	Mudflats and lakeshores; with Sium suave, Ranunculus aquatilis and Downingia elegans; with Carex lenticularis, Gnaphalium palustr and Cyperus aristata.	
Ranunculus glaberrimus Hook. Fremont, ID; T12N R41E SEC 11 SW 4; 6400'	common	Sagebrush flats; with Artemisia tridentata, Lithophragma bulbifera, Mertensia oblongifolia, and Claytonia lanceolata.	Scenic.
Ranunculus inamoenus Greene Fremont, ID; T11N R42E SEC 7 NW ½; 6600'	unknown	Around springs where vegetation is not dense at Lylc Springs; with Salix spp. Valeriana occidentalis, Androsace filiformis, and Cardamine breweri.	
Ranunculus jovis A. Nels Fremont, ID; T10N R42E SEC 24 NE 1/4; 6200'	common	Recently snowfree ground in sagebrush areas; with Artemisia tridentata, Poaceae spp. and Eriogonum spp.	Scenic.
Ranunculus macounii Britt. Fremont, ID; T9N R42E SEC 11 NE 1/2; 5500'	unknown	Marshy bank of Willow Creek under willows; with Mimulus moschatus, Mimulus gutattus, and Veronica anagalis - aquatica.	

Name	Status	Habitat Information	Known Economic Importance
Ranunculus natans Meyer. Fremont, ID; T11N R42E	unknown	Water and adjacent mud of drying pools and ditches around Lyle Springs; with	
SEC 7 NE ½; 6400'		Alopecurus alpinus, Sisyrinchium angustifolium, and Carex spp; found only at one location; not around stock ponds.	
•		at one ruchtron, not around stock points.	d .
Ranunculus orthorhynchus Hook	unknown	Moist woodland depression; with <u>Pseudo-</u> tsuga menziesii, <u>Picea engelmannii</u> ,	
Fremont, ID; T8N R45E SEC 8 SW-14; 6350'	•	Elymus glaucus, and Arnica parryi; found only at one location.	•
Ranunculus uncinatus	common	Moist open shade often under Aspen; with	
D. Don Fremont, ID; T11N R42E SEC 7 NW 1; 6400'	•	Populus tremuloides, Geranium richardsonii, Equisetum arvense and Carex spp.	
.,			
Thalictrum occidentale	common	Moist to wet open woods; with Pinus	Scenic
Gray Fremont, ID; T10N R43E SEC 8 SE 4; 5900'		contorta, Arnica cordifolia, and Fragaria virginiana.	
' Thalictrum sparsiflorum	common	Open marshy areas along streams and	
Turcz.	Conditor	around springs, with Carex aquatilis,	
Fremont, ID; T14N R44E SEC 20 SW ½; 6400'		Pedicularis groenlandica, and Habenaria dilatata.	
Trollius laxus Salisb.	uncommon	Moist shaded bank of subalpine dry	
Fremont, ID; T12N R45E SEC 23 SW ½; 7750'		streambed; with <u>Pinus contorta</u> , <u>Dodecatheon</u> <u>pulchellum</u> , <u>Viola adunca</u> and <u>Ranunculus</u> alismaefolius; found only at one location.	

	Name	Status	Habitat Information	Known Economic Importance
	RHAMNACEAE			
	Ceanothus velutinus Dougl. Fremont, ID; T13N R44E SEC 26 SW 1/4; 6500'	common	Open woods, clearcuts, and adjacent road- sides; with Pinus contorta, Pepulus trichocarpa, and Gayophytum diffusum; or with Pseudotsuga menziesii, Spiraea betulifolia, and Phacelia heterophylla.	Winter forage; used as a tea by man.
	Rhamnus alnifolia L'Her. Fremont, ID; T9N R44E SEC 3 SE 1/4; 5500'	unknown	Open streambank along Robinson Creek, with Alnus incana, Cretaigus douglasii, Picea engelmannii and Rubus idaeus.	Tea from bark may be used as a gentle laxative.
	ROSACEAE			
•	Amelanchier alnifolia Nuct. Fremont, ID; T10N R43E SEC 8 SE 1/4; 5900'	abundant	Wide spread; most common near streams and rivers, but also in adjacent open woods and dry hillsides; with Alnus incana, Betula glandulosa and Cornus stolonifera; or with Artemisia tridentata, chrysothamnus nauseosus and Linum perenne; or with Cretaegus douglasii, Festuca idahoensis and Solidago missouriensis.	Berries abundant and edible for humans and numerous wildlife; scenic when in flower.
	Crataegus douglasii Lindl. Fremont, ID; T9N R45E -SEC-16 SW ½; 5800'	common	Along streams and in adjacent meadows and sagebrush uplands; with Alnus incana, Amelanchier alnifolia; or with Artemisia tridentata, Linum perenne and Chrysothanmus. nauseosus.	Berries utilized by Bohemian waxwings and other birds and many native animals including deer. Porcupines utilize bark extensively. Trees important for nesting habitat
	Fragaria virginiana Duchesne Fremont, ID; T10N R43E SEC 8 SE ½; 6000'	common	Open woods; with <u>Pinus contorta</u> , <u>Arnica cordifolia</u> and <u>Sorbus scopulina</u> .	Fruits edible for humans and numerous wildlife species. Leaves and stem are an important forage.

<u> </u>	ame	Status	Habitat Information	Known Economic Importance
	Geum macrophyllum Willd. Fremont, ID; T12N R41E SEC 13 SE ½; 6400'	common	Moist open meadows; with Potentilla gracilis, Trifolium longipes, Geranium viscossissimum and Lupinus argenteus.	Forage plant for domestic and wild animals.
	Geum triflorum Pursh. Fremont, ID; T10N R43E SEC 8 SE 14; 5900'	common	Open rocky outcroppings along the Snake river and in subalpine meadows on slopes of Mt. Two Top; with Antennaria microphylla, Chenopodium fremontii	Scenic. Some forage value.
			and symphoricarpos oreophilus; or with Artemisia tridentata, Antennaria corymbosa and Abies lasicempa.	
	Ivesia gordonii (Hook.) T. & G. Fremont, ID; T11N R45E SEC 9 SW 社; 7200	common	Bare rocky subalpine streambeds and adjacent meadows; with Soldago nana, Aster integrifolius, and Carex douglasii.	
	Fremont, ID; T12N R42E SEC 17 NW 4; 6300'	common	Lakeshore and adjacent mudflats of Island Park Reservoir; with Rorippa obtusa and Oenothera breviflora.	Used by man and waterfowl for food.
	Potentilla arguta Pursh. Fremont, ID; T11N R42E SEC 7 NE 4; 6400'	COMMON	Moist open meadows; with Sisyrinchium angustifolium, Wyethia amplexicaulis, Wyethia helianthoides and Stipa occidentalis; or with Geranium viscosis-	Some forage value.
			simum, Helianthella uniflora and Lupinus argenteus.	

			Known
Name	Status	Habitat Information	Economic Importance
Potentilla biennis Greene Fremont, ID; T9N R42E SEC 12 SW 4; 5200'	common	Moist disturbed meadows, lakeshores and roadsides; with Bromus carinatus, Carex athrostachya and Cirsium arvense.	Some forage value.
Potentilla diversifolia Lehm. Fremont, ID; T14N R44E SEC 20 SW 4; 6400'	common	Moist open meadows; with Potentilla gracilis, Senecio integerrimus and Bromus carinatus; or with Carex aquatilis, Penstemon procerus, Castilleja cusickii, and Rumex paucifolius; or with Artemisia tridentata, Abies lasciocarpa and Antennaria corymbosa.	Some forage value.
Potentilla fruticosa L. Teton, WY; T47N R118W SEC 15 NW 4; 6500'	uncommon	Moist open roadside adjacent to Jackass meadows; with <u>Poaceae</u> spp. and <u>Carex</u> spp.; found only at one location.	Forage for livestock and game animals.
Potentilla glandulosa Lindl. Gallatin, MT; T14S R5E SEC 7 SE ½; 7400'	common	Rock slides to dry open woods; with Juniperus communis and Pinus contorta.	Some forage value.
Fremont, ID; T14N R44E SEC 20 SW 1/4; 6400'	common	Moist open meadows; with Geranium viscosissimum, Potentilla arguta and Bromus carinatus.	Some forage value.
Potentilla palustris (L.) Scop. Fremont, ID; T13N R43E. SEC 27 NE ½; 6300'	common	Open stream banks often with stems and leaves trailing in water, with Carex aquatilis, Barbarea orthoceras and Salix spp.	Some forage value.

Name	Status	Habitat Information	Known Economic Importance
Prunus virginiana L. Fremont, ID; T10N R43E SEC 8 SE %; 6000'	common	Widespread; moist open woods and on dry open canyon sides above streams; with Pinus contorta, Populus tremuloides and Sorbus scopulina; or with Artemisia tridentata, Rosa woodsii and Amelanchier alnifolia.	Fruit eaten and processed by man. Valuable food for birds, coyotes and other mammals. Spring shoots toxic to domestic livestock.
Purshia tridentata (Pursh.) D.C. Fremont, ID; T10N R42E SEC 13 NW 4; 6200'	common	Occasional in sagebrush flats and dry clearcuts; with Pinus contorta Lomatium ambiguum and Agastache urticifolia.	Very important browse at all seasons for all big game animals. Browsed by domestic livestock.
Rosa nutkana Presl Fremont, ID; T9N R44E SEC 4 SE 4; 5600'	uncommon	Moist open meadow; with <u>Symphoricarpos</u> oreophilus and <u>Bromus carinatus</u> ; found only at one location.	Hips make an excellent tea when dried and boiled; they can also be eaten raw; high in Vitamin C.
Rosa woodsii Lindl. Fremont, ID; T8N R45E SEC 16 SE 4; 6150'	common	Dry hillsides and roadbanks and in clearings; with Agastache urticifolia, Gilia aggregata and Viguiera multiflora; or with Pseudotsuga menziesii, Aster	Same as above.
		conspicuus and Habenaria unalaskensis.	
Rubus idaeus L. Fremont, ID; T9N R44E SEC 3 SE 4; 5500'	common	Widespread in rocky areas; open woods, streambanks, and subalpine crest of Mt. Two Top, with Erigeron acris and Woodsia scopulina; or with Agrostis variabilis, Valeriana acutiloba and Ribes montigenum.	Fruit readily eaten by man and animals. Leaves make good tea.
Rubus parviflorus Nutt. Fremont, ID; T14N R44E SEC 22 NW 4; 6550'	common	Moist shaded woods and adjacent road- sides; with <u>Pseudotsuga menziesii</u> , <u>Pteridium aquilinum, Sorbus scopulina</u> , and <u>Vaccinium globulare</u> .	Fruit edible to man, birds and mammals.

Name	<u>Status</u>	Habitat Information	Known Economic Importance
Sibbaldia procumbeus L. Fremont, ID; T12N R45E SEC 23 SW ½; 7750'	uncommon	Along banks of subalpine stream beds at higher elevations and in snowbank areas on Mt. Two Top; with Dodecatheon pulchellum, Polygonum bistortoides and Viola adunca; or with Juncus mertensianus, Carex microptera and Ranunculus eschscholtzii.	
Sorbus scopulina Greene Fremont, ID; T10N R43E SEC 8 SE 4; 6000'	common	Moist open woods; with Pinus contorta, Prunus virginiana, Vaccinium scoparium, and Populus tremuloides, or with Pseudotsuga menziesii, Rubus parviflora and Pteridium aquilinum.	Berries eaten by birds, robins, grosbeaks, wax-wings, western red squirrels, rough and blue, as well as all other grouse; plants browsed by big game. Important for shelter.
Spiraea betulifolia Pall. Teton, WY; T47N R118W SEC 1 SW ½ 6550' RUBIACEAE	common	Open moist to dry woods; with Pinus contorta, Pterospora andromeda, and Vaccinium scoparium; or with Pseudotsuga menziesii, Ceanothus velutinus and Phacelia heterophylla.	Some browse value,
Fremont, ID; T9N R42E SEC 11 NE 4; 5200'	unknown	Maple scrub above Willow Creek; with Pseudotsuga menziesii, Acer glabrum, Acer grandidentatum, and Festuca subalata; found only at one location, but probably common.	Can be used for tea. Apparently eaten by foraging animals. Excellent for stuffing matresses.
Galium bifolium Wats. Fremont, ID; T14N R44E SEC 16 NE 坛; 6400'	common	Bare areas in moist meadows and clear- cuts; with <u>Mimulus guttatus</u> , <u>Mimulus</u> <u>lewesii</u> , <u>Carex hoodii</u> , and <u>Populus</u> <u>tremuloides</u> .	Same as above.

Name	Status	Habitat Information	Known Economic Importance
Galium boreale L. Fremont, ID; T14N R44E SEC 20 SW 4; 6400'	common	Moist to wet woodlands generally along the margins of marshy areas; with Pinus contorta, Pyrola asarifolia and Alopecurus alpinus.	Same as above.
Galium trifidum L. Gallatin, MT; T14S R5E SEC 18 SE ½; 6750'	common	Wet bare ground around springs or in woodland depressions; with Mimulus guttatus, Senecio triangularis, and Mimulus primuloides; or with Carex langinosa, Eleocharis asicularis, and Salix spp.	Same as above.
Galium triflorum Michx. Teton, WY; T47N R118W SEC 1 SE 14; 6550'	common	Bare areas in moist woods along streams; with Populus trichocarpa, Osmorhiza chilensis and Pyrola secunda.	Same as above.
Kelloggia galioides Torr. Fremont, ID; T10N R45E SEC 26 NW 1/4; 6200'	uncommon	Dry rock crevices on cliffs on south- facing side of Robinson Creek Canyon.	
SALICACEAE			

Populus tre	muloides	abundant	Scattered groves in coniferous woods and	One of the most important
Michx.	•		in open wet areas around streams and	cover and browse species of
Bingham,	ID; E. fork		springs; also in exstensive stands on	the area for deer, elk and
Mink Cree	k		dry rocky hillsides in the southern	moose. Beaver and smaller
			region of the study area; with Pinus	mammals as well as domestic
			contorta, Sorbus scopulina and Berberis	live stock also utilize
			repens or with Geranium richardsonii,	it for food and shelter.
	* • •		Equisetum arvense and Salix spp.; or with	Grouse utilize buds as
		•	Mimulus guttatus, Mimulus Lewesii and Carex	an important winter food.
,			hoodii; or with Phacelia heterophylla,	-
			Phacelia hastata, and Spiraea betulifolia.	

<u>Name</u>	Status	Habitat Information	Known Economic Importance
Fopulus trichocarpa T. & G. Fremont, ID; T13N R44E SEC 29 SE ½; 6400'	common	Along streams and—as saplings—along moist roadsides; with Populus tremuloides, Alnus incana and Betula glandulosa.	Same as above to a more restricted degree.
Salix scouleriana Barratt Fremont, ID; T10N R43E SEC 25 SE 1; 5900'	common	Moist open woods, the only willow in the area not primarily associated with water; with <u>Pseudotsuga menziesii</u> , <u>Rubus parviflorus and Populus</u> tremuloides.	Forage for elk, deer and moose.
Salix spp.	abundant	Scattered clumps to dense thickets along streams and springs; closely associated with beaver activity.	
SANTALACEAE			
Comandra umbellata (L.) Nutt. Fremont, ID; T8N R44E SEC 21 NE 4; 6000' SAXIFRAGACEAE	common	Mountain brush communities; with Artemisia tridentata, Purshia tridentata and Symphoricarpos oreophilus,	
Heuchera parvifolia Nutt. Fremont ID; T10N R43E SEC 8 SE ½; 5900'	common	Rocky outcroppings along riverbanks and at summit of Mt. Two Top; with Antennaria microphylla, Amelanchier alnifolia, and Arenaria congesta; or with Phacelia sericea, Sedum lanceolatum and Haplopappus acaulis.	Limited forage value,
Lithophragma bulbifera Rydb. Fremont, ID; T12N R41E SEC 11 SW 4; 6400'	common	Bare often disturbed ground in sagebrush communities; with Fritillaria pudica, Claytonia lanceolata, Collinsia parviflora, and Hesperochrion pumilis.	Scenic; bulbs eaten by game birds.

Name	Status	Habitat Information.	Known Economic Importance
a 1 let bal les		And the property of the proper	Economic Importance
Lithophragma parviflora (Hook.) Nutt. Fremont, ID; T10N R42E SEC 13 NW 4; 6200'	uncommon	Moist bare areas in meadows and clear-cuts; with Purshia tridentata, Collinsia parviflora, and Lomatium ambiguum.	Provides very early spring browse.
Mitella pentandra Hook. Fremont, ID; T15N R44E SEC 15 NE 14; 7800'	uncommon	Wet woods along brook on north side of Mt. Two Top; with <u>Picea engelmannii</u> , <u>Saxifraga arguta</u> , <u>Streptopus amplexifolius</u> <u>Caltha leptosepala</u> and <u>Habenaria delatata</u> ;	Some streamside forage value.
Mitella stauropetala Piper	common	Moist, shady forests on north facing sides of canyons draining the Madison	Same as above.
Fremont, ID; T12N R45E SEC 6 NE 4; 6800'		Plateau; with M. pentandra, Vaccinium globulare, Acer glabrum and Clematis columbiana.	
		Construction of the Constr	
Parnassia fimbriata	uncommon	Same as <u>Mitella pentandra</u> .	
Konig. Fremont, ID; T15N R44E SEC 15 SW 坛; 8500'			
Saxifraga arguta D.Don Fremont, ID; T15N R44E SEC 15 NE 4; 7800	rare	Same as <u>Mitella pentandra</u> .	Limited forage value.
Saxifraga occidentalis	common	Shady moss covered ledges and crevices	Cama huarra
Wats. Fremont, ID; T12N R45E SEC 6 NE 4; 6800'	Common	on boulder fields; with Rubus idaeus, Ribes lacustre and Draba spp.	Some browse.
Saxifraga oregana Howell Gallatin, MT; T14S R4E SEC 3 SW 4; 7600'	uncommon	Open marshy meadow at headwaters of West Cream Creek; with <u>Dodecatheon</u> pulchellum, Aconitum columbianum,	
222 0 24 4, 7000		Carex raynoldsii, and Mertensia ciliata. 124	

•			Known
Name	Status	Habitat Information	Economic Importance
SCROPHULARIACEAE			
Castilleja cusickii Greenm. Fremont, ID; T8N R45E	uncommon	Moist to wet meadows; with <u>Carex</u> <u>nebraskensis</u> , <u>Trifolium pratense</u> , and <u>Gentiana affinis</u> ; or with <u>Carex</u>	Scenic.
SEC 11 SW 4; 6200'		aquatilis, Penstemon procerus, and Rumex paucifolius.	
A. Nels. Fremont, ID; T14N R44E SEC 20 SW 1/4; 6400'	common	Dry rocky sagebrush flats; with Artemisia tridentata, Eriogonum heracleoide Eriophyllum lanatum, and Agoseris glauca.	Limited forage es, value.
Castilleja miniata Dougl. Fremont, ID; Tiln R42E SEC 7 NW 4; 6160'	abundant	Moist to wet meadows and adjacent wood- lands, and roadsides; with <u>Populus</u> tremuloides, <u>Equisetum arvense</u> , and <u>Geranium richardsonii</u> ; or with <u>Salix</u> spp., <u>Mertensia ciliata</u> , and <u>Hackelia</u> <u>micrantha</u> .	Very scenic; limited forage value.
Collinsia parviflora Lindl. Fremont, ID; T10N R43E SEC 8 SE ½; 6000'	common	Moist open areas in meadows and woods, and along roadsides; with Linanthus septentrionalis, Lomatium ambiguum, and Gayophytum diffusum; or with Pinus contort Fragaria virginiana, Arnica cordifolia, and Thalictrum occidentale.	Scenic; limited early spring forage.
Linaria vulgaris Hill Fremont, ID; T8N R45E SEC 5 NE ½; 6000'	common	Disturbed open woods and roadsides; with Verbascum thapsus, Hordeum jubatum, and Agropyron cristatum.	Very scenic,
Mimulus breviflorus Piper Fremont, ID; T12N R43E SEC 32 SE ½; 6400'	unknown	Edge of Carex bog on wet ground; with Polygonum confertifolium, Carex rostrata, Orobanche uniflora, and Eleocharis pauciflorus.	

Name	Status	¥2	Habitat Information	Economic Importance
Mimulus moschatus Dougl. Fremont, ID; T9N R42E SEC 11 NE 1/4; 5500'	unknown		Marshy bank of Willow Creek under willows; with Ranunculus macounii, Mimulus gutattus, and Veronica anagallis - aquatica.	Scenic.
Mimulus guttatus DC. Fremont, ID; T14N R44E SEC'16 NE 1/4; 6420'	common		Along streambanks and around springs; with Mimulus Lewisii, Carex hoodii, and Trifolium longipes; or with Gentiana detonsa, Aster chilensis, and Carex luzulina; also occasional in moist	Very scenic; some browse value.
Mimulus lewisii Pursh Fremont, ID; T14N R44E SEC 16 NE 4; 6420'	common		clearcuts. Same as above.	Very scenic.
Mimulus primuloides Benth Gallatin, MT; T14S R5E SEC 18 SE 6800'	· common	•	Wet areas usually around springs; with Senecio triangularis, Λconitum columbianum and Galium trifidum.	
Orthocarpus luteus Nutt. Fremont, ID; T8N R45E SEC 6 NW 4; 5935'	common		Disturbed meadows; with <u>Bromus</u> carinatus, <u>Symphoricarpos</u> oreophilus, and <u>Urtica dioica</u> .	
Pedicularis bracteosa Benth. Fremont, ID; T11N R42E SEC 19 SW 4: 6773'	common	,	Moist open woods and adjacent meadows and clearcuts; with Potentilla gracilis, Gayophytum diffusum, and Poaceae spp.; or with Osmorhiza chilensis, Valeriana occidentalis, Pinus contorta, and Androsace filiformis.	Scenic.
Pedicularis groenlandica Retz. Fremont, ID; T14N R44E SEC 20 SW 4; 6400'	common		Open marshy meadows to subalpine streambank with Carex aquatilis, Habenaria dilatata, and Thalictrum sparsiflorum; or with Dodecatheon pulchellum, Veronica wormskjoldii, and Polygonum bistortoides.	s; Very scenic.

Known

	a,		Known
Name	Status	Habitat Information	Economic Importance
Pedicularis racemosa Dougl.	common	Open woods at higher elevations; with Pinus contorta, Vaccinium scoparium,	Scenic.
Gallatin, MT; T14S R4E SEC 22 NW 4; 7600'		and Arnica latifolia; or with Picea engelmannii, Abies lasiocarpa, and Vaccinium scoparlum.	•
Penstemon cyaneus Pennell Fremont, ID; T14N R44E	common *	Báre dirt banks mostly along roads; with Senecio cymbalarioides; or with	Very scenic.
SEC 9 SW 1/4; 7000'	· · · · · · · · · · · · · · · · · · ·	Tanacetum vulgare, Melilotus officinale, and Medicago lupulina.	
Penstemon deustus Dougl.	common	Open rocky outcroppings; with Allium	Scenic.
Fremont, ID; T10N R43E		brevistylum, Solidago nana, and Arenaria	
SEC 17 NE 4; 5800'		congesta.	
Penstemon fruticosus	common	Dry open roadbanks at higher elevations;	
(Pursh) Greene	•	with (in adjacent woods) Pinus contorta,	
Frement, ID; T13N R45E		Abies lasiocarpa; and Vaccinium	
SEC 9 SW 4; 7600'		scoparium.	
Penstemon procerus Dougl.	common	Moist meadows and clearcuts to rocky out-	, a
Fremont, ID; T11N R42E		croppings at summit of Mt. Two Top; with	
SEC 6 NE 4; 6400'		Lupinus argenteus, Geranium viscosissimum,	
	n _i	and Gayophytum diffusum; or with Potentill	<u>a</u>
	•	gracilis, Carex simulata, and Rumex	
		paucifolius; or with Antennaria	,
		umbrinella, Phacelia sericea, and Erigeron	
		compositus.	
Scrophularia lanceolata	common	Disturbed rocky areas in moist woods & asso	C-
Pursh		iated with willows along Willow Creek canyo	
Fremont, ID; T11N R42E		with Erigeron acris, Rubus idaeus, Viola	·
SEC 7 NW ½; 6400'	a • •	adunca, and Pseudotsuga menziesii; or with	
		Salix spp., Hackelia micrantha, and Stellar	<u>ia</u>
		vulgaris.	

\overline{N}	ane ,	Status	Habitat Information	Known Economic Importance
	Verbascum thapsus L. Fremont, ID; T8N R45E SEC 6 NW 1/2; 5935	common	Disturbed areas; with Lychnis alba, Castilleja miniata, and Plantago major;	Many small birds use the seeds during critical winter period
	SEC O MW 2; 3933		or with <u>Cirsium vulgare</u> , <u>Lactuca</u> serriola, and <u>Bromus commutatus</u> .	because these protrude above the snow.
	Veronica americana	common	Wet areas on streambanks and along	Used by stream-side
	Schwein.		edges of marshy depressions and springs;	foragers of all sizes;
	Fremont, ID; T14N R44E		with Rorippa nasturtium-aquaticum,	edible for humans.
	SEC 18 SW %; 6400'		Mertensia ciliata, and Salix spp.	
	Veronica peregrina L.	unknown	Margins of stockponds; with Rorippa	Same as above.
	Fremont, ID; T10N R43E		obtusa, Eleocharis acicularis, and	•
	SEC 17 NE 坛; 5800'	•	Veronica serpyllifolia; found only	
٠		, •	at one location.	
		• .		
	Veronica scutellata L.	unknown	Wet areas in habitat similar to that of	
	Fremont, ID; T14N R44E (SEC 20 SN 4; 6400'	•	V. americana; with Eleocharis acicularis, Juncus ensifolius, and Galium trifidum;	
	3LC 20 3N -4, 0400		found only at one location.	
		•	Tourd city at one rocation.	
	Veronica serpyllifolia L.	common	Disturbed areas near water, and along	Stream-side forage.
٠	Fremont, ID; T12N R41E		roadsides; with Trifolium repens,	
	SEC 13 SE 4; 6400'		Trifolium longipes, and Rorippa curvisiliqua	<u>a</u>
	Veronica wormskjoldii	common	Wet meadows and along wooded subalpine	Same as above,
	Roem. & Schult.		streambeds at higher elevations; with	
•	Gallatin, MT; T14S R5E	•	Dodecatheon pulchellum, Vicla adunca, and	
	SEC 22 NE 4; 7400'		Ranunculus alismaefolius.	
	*	•		

		•	
Fremont, ID; T9N R44E SEC 7 SW 4; 5300'		ground; with Agropyron repens, Cirsium arvense, Cirsium vulgare,	
020 / 011 4, 2002	•	and Verbena bracteata; found only	
		at one Location.	
SPARGANIACEAE			
1	•		
Sparganium emersum Rehmann	common	Edges of shallow lakes; with <u>Sagittaria</u> cuneata, Myriophyllum spicatum and	Roots utilized by man and aquatic mammals; leaves
Teton, WY; T47N R118W		Carex aquatilis.	browsed by moose.
SEC 4 SW 1/4; 6400'	` .		
ТҮРНАСЕЛЕ			
Typha latifolia L.	common	Edges of shallow lakes and along Snake	Valuable plant for aquatic
Fremont, ID; T9N R45E		River at lower elevations; with Nuphar	mammals and waterfowl for
SEC 35 SW ½; 6450'		polysepalum and Potamogeton spp.; or	shelter, nesting, cover
		with Alnus incana, Scirpus acutus, and Helianthus nuttallii.	and food; could be utilized by man for food as all part
•		and hearthan maceanar.	are edible.
•	*		-
URTICACEAE			
Parietaria pensylvanica	rare	Shaded rock crevices on outcroppings	
Muhl.	•	high on north side of lower Black	
` Fremont, ID; T14N R44E SEC 23 SW 坛; 7000'		Canyon; with Stephanomeria tenuifolia, Rubus idaeus, Sorbus scopulina, and	
550 23 SW 2; 7000		Pseudotsuga menziesii; found only at	
	•	one location.	
•		one recursive	
Urtica dioica L.	common	Moist often disturbed areas usually	Disturbing plant because
Fremont, ID; T9N R42E		near streams or rivers; with Glycyrrhiza	of stinging hairs; makes a
SEC 13 NW 1/4; 5200'		lepidota, Arctium lappa, and Oenothera	good potherb when young if
		biennis; or with Picea engelmannii,	boiled properly.
		Alnus incana and Cretaegus douglasii.	
	* -		

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Habitat Information

Disturbed areas in Warm River Camp-

Status

Name

SOLANACEAE

Hyoscyamus niger L.

Known Economic Importance

Poisonous to most animals.

Valeriana acutiloba Rydb. uncommon Fremont, ID; T15N R44E SEC 16 SE %; 8700	Rock outcropping on south summit of Mt. Two Top; with Agrostis variabilis, Rubus idaeus and Abies lasciocarpa; found only at one location, may exist in cool sites on outcroppings at lower elevations.	Good salad plant for man; relished by all browsing animals including domestic livestock.
Valeriana edulis Nutt. common Fremont, ID; T14N R44E SEC 2C SW %; 6400' Valeriana occidentalis common Heller Fremont, ID; T10N R43E SEC 17 NE ½; 5800'	Wet meadows in bottomlands along Henry's Lake outlet with Carex spp., Cirsium scariosum, Allium schoenoprasum and Pedicularis groenlandica. Open to lightly-shaded, moist meadows and streambanks; with Allium brevistylum, Camassia quamash, Allium geyeri and Alnus incana; or with Populus tremuloides,	Same as above; roots are especially edible to man. Good salad plant for man; relished by all browsing animals including domestic livestock.
Verbena bracteata uncommon Lag. & Rodr. Fremont, ID; T9N R44E SEC 7 SW 1/4; 5300'	Mimulus lewesii, Carex hoodii and Castilleja miniata. Roadside disturbed areas at Warm River campground; with Hyoscyamus niger, Cirsium arvense and Machaeranthera canescens.	Small birds utilize seeds.

Habitat Information

Status

common

Name

VALERIANACEAE

VIOLACEAE

Viola adunca Sm.

Fremont, ID; T12N R45E

SEC 23 SW ½; 7750°

Known

Economic Importance

Leaves and flowers edible

important spring forage.

for humans; scenic;

racemosa.

Moist woods and shaded streambanks in

groenlandica, Dodecatheon pulchellum, and Ranunculus alismaefolius; or with Pseudotsuga menziesii and Sambucus

open woods; with Pinus contorta,

Veronica wormskjoldii, Pedicularis

•			
Viola nuttallii Pursh Fremont, ID; T9N R42E	very common	Widespread in open areas from sagebrush flats to meadows, open woods and clear-	Leaves and flowers edible for humans; scenic;
SEC 13 NW 4; 5200'		cuts; with Artemisia tridentata, Collinsia	important spring forage.
		parviflora, and Fritillaria pudica; or with Pinus contorta, Gerainium	,
•		viscosissimum, and Lupinus argenteus; or	
		with Gayophytum diffusum, Polygonum douglasii, and Arnica cordifolia.	
Viola palustris L. Fremont, ID; T15N R44E SEC 15 SW 1/4; 8500'	uncommon	Streambanks in open to deep shade; with Agrostis idahoensis, Salix spp. and Agrostis variabilis	Leaves and flowers edible for humans; scenic; important spring forage.

Open south facing slopes in sparse

vegetation; with <u>Dodecatheon pulchellum</u>, <u>Phlox multiflora</u>, <u>Carex rossii</u>, and <u>Artemisia ludoviciana</u>.

Habitat Information

Status

common

Name

Viola pupurea Kell.

SEC 28 S 1/2; 7400'

Fremont, ID; T12N R45E

Known

Same as above.

Economic Importance.

Plant List for

ZONE 3: UPPER TIMBERLINE ZONE

·	•		Known
Name	Status	Habitat Information	Economic Importance
		Bring to Charles for the State of the State of the Charles and the State of the Sta	
APIACEAE		,	
•	·	·	
Ligusticum filicinum	common	Moist woods to open hillsides; with	
Wats.	•	Pinus contorta, Helianthella quinquenervis,	and
Teton, WY; T47N R118W		Epiloblum angustifolium; or with Sedum	
SEC 4 SW 4; 64001	•	lauceolatum, Festuca idahoensis, and Rumex	
	•	paucifolia.	
	•		
ASTERACEAE			
•			
Achillea millefolium L.	abundant	Perhaps the most ubiquitous herb in the	Medicinal value; roots
Fremont, ID; T15N R44E		area. Moist to dry open woods, meadows	usable as dye; indicator
SEC 16 SE 4; 8700'		and streambanks at all elevations; with	of disturbed areas.
·	1	Pinus contorta, Arnica cordifolia, and	
		Fragaria virginiana; or with Lupinus argent	eus,
•	•	Geranium viscosissimum, and Castilleja	
•		mininta; or with Phacelia sericen, Pinus	
		albicaulis, and Sedum lanceolatum.	
45			
Agoseris glauca (Pursh)	common	Drier clearcuts to sagebrush meadows to	Seeds favored by
Raf,	•	summit of Mt. Two Top, usually on bare soil	; goldfinches.
Fremont, ID; Tl4N R44E		with Agoseris aurantiaca, Arnica parryi,	
SEC 20 SE 4; 6400'		Hieracium albiflorum, and Epilobium spp.,	
		or with Artemisia tridentata and Eriogonum	
		umbellatum.	
Antennaria umbrinella	common	Open woods to rocky sagebrush meadows at	
Rydb.	•	lower elevations, to rocky exposed summit	
Fremont, ID; T15N R44E		of Mt. Two Top; with Antennaria microphyll	<u>a,</u>
SEC 16 SE 1; 8700'	• • • •	Ponceae spp., and Potentilla gracilis; or	
		with Erigeron compositus, Penstemon procer	us,
		and Phacelia sericea.	

Name	Status	Habitat Information	Known Economic Importance
Arnica latifolia Bong. Fremont, ID; T15N R44E SEC 21 NE ½; 7900'	common	Dry open woods at higher elevations, with <u>Picea engelmannii</u> and <u>Pedicularis</u> racemosa.	
Artemesia tridentata Nutt. Fremont, ID; T13N R44E SEC 5 NE 4; 6400'	abundan t	Dry flats and hillsides, often with poor soil development and exposed bedrock; with Ponceae spp., Polygonum douglasii, Cryptantha torreyana, and Eriogonum heraele oides.	Winter forage value for wildlife.
Aster integrifolius Nutt. Fremont, ID; T11N R45E SEC 9 SW 4; 7200'	common	Widespread in bare areas in moist open meadows at mid to upper elevations; with Agrostis scabra, Solidago nana, and Danthonia intermedia.	Scenic.
Balsamorniza segittata (Pursh) Nutt. Gallatin, MT; T14S R4E SEC 22 NW 4; 7600'	common	Open, dry, rocky hillsides at all elevations with Symphoricarpos oreophilus, Lupinus argenteus, and Festuca idahoensis; or with Phacelia sericea, Juncus confusus, and Festuca idahoensis.	roots edible for hu- mans; seeds utilized by birds; scenic.
Crepis atrabarba Heller Fremont, ID; T15N R44E SEC 16 SE 4; 8650'	uncommon	Open rocky summit of Mt. Two Top; with Sedum lanceolata, Heuchera parvifolia, Besseya wyomingensis, and Phacelia sericea.	
Erigeron compositus Pursh Fremont, ID; T15N R44E SEC 16 SE 1/2; 8650'	uncommon	Primarily on rocks at summit of Mt. Two Top, but also found in dry microsites on lava outcroppings at lower elevations; with Antennaria alpina, Phacelia sericea, an Penstenon procerus; or with Populus tremuloides, Rubus idaeus, and Woodsia	Scenic.

			Known
Name	Status	Habitat Information	Economic Importat
Erigeron ursinus DC. Eat. Fremont, ID; T15N R44E SEC 16 SE 1/2; 8650	uncommon	Bare open areas along summit ridge of Mt. Two Top; with <u>Phacelia sericea</u> , <u>Pinus albicaulis</u> , and <u>Festuca idahoensis</u> .	Scenic.
Haplopappos acaulis (Nutt.) Gray Fremont, ID; T15N R44E SEC 16 SE 1/4; 8650	rare	Rocky open summit of Mt. Two Top; with Phacelia serices, Meuchera parvifolia, and Sedum lanceolatum.	`Scenic.
Taraxacum officinale Weber Fremont, ID; T15N R44E SEC 21 NE 1/4; 8500' BRASSICACEAE	common	Moist disturbed areas; with Spergularia rubra and Polygonum aviculare.	Noxious weed.
Arabis lemmonii Wats. Fremont, ID; T15N R44E SEC 20 NW 4; 8600' Arabis sparsiflora Nutt. Fremont, ID; T15N R44E		Bare snowbank areas on north side of Mt. Two Top; with Oxyria digyna, Androsace septentrionalis, and Lewesia pygmaea. Open bare sites throughout the area; with Phacelia serices, Sedum lanceolatum and	Some forage value
SEC 16 SE %; 8700 Capsella bursa-pastoris	common to	Naplopappus acaulis. Disturbed areas, roadsides, streambanks,	Edible; weed.
(L.) Medic. Frement, ID; T10N R43E SEC 17 NE 4; 5800'	abundant	margins of stockponds, lakeshores, etc.; with Lepidium virginicum, Rorippa curvisili and Spergularia rubra.	gua,
Draba crassifolia R. Grah. Fremont, ID; T15N R44E SEC 15 SW 4; 8600'	uncommon	Open subalpine parkland on north side of Mt. Two Top, usually on north side of isolated trees; with Abies lasciccarpa, Pinus albicaulis, and Sedum lanceolatum.	

, n				Known
Name		Status	Habitat Information	Economic Importance
Lepidium virgir Fremont, ID; SEC 15 NE ½;	T10N R42E	abundant	Almost any kind of hard, bare ground; with Spergularia rubra, Capsella bursa-pastoris, and Rorippa curvisiliqua.	Weed.
Rorippa curvis: (Hook.) Bessey Fregont, ID; SEC 13 SE 1/4; CAPRIFOLIACEAE	T12N R41E	common	Moist disturbed areas, roadsides, meadows, clearcuts, margins of stockponds and lakeshores; with Veronica percerina, Plagiobothrys scouleri, and Spergularia rubra.	Minor value as water- fowl food.
Symphoricarpos Gray Fremont, ID; SEC 17, NE 1/a;	T10N R43E ·	common to abundant	Dry to moist open woods to open meadows to subalpine ridges of Mt. Two Top, often in rocky areas; with Arenaria congesta, Heuchera parvifolia, and Pinus contorta.	Important grouse food; toxic to humans.
CARYOPHYLLACÉAE				
Silene oregana Fremont, ID; SEC 27 NE %;	T13N R43E	common	Dry open woods to meadows, clearcuts, and subalpine slopes; with <u>Pinus contorta</u> , <u>Senecio serra</u> , and <u>Hieracium cynoglossoides</u> or with <u>Abies lasciocarpa</u> , <u>Pinus albicaulis</u> and <u>Festuca idahoensis</u> .	
Spergularia rub Presl Fremont, ID; SEC 7 NE 4;	Tlln R42E	abundant	Disturbed areas, roadsides, lakeshores, and margins of stockponds; with Rorippa curvisiliqua, Lepidium virginicum, and Polygonum aviculare.	Disturbed area erosion control.
CRASSULACEAE				
Fremont, ID; SEC 16 SE 4;	T15N R44E	common	Slopes and rocky subalpine summit of Mt. Two Top: with Pinus albicaulis, Phacelia sericea, and Haplopappus acaulis.	Edible to humans & of minor browse value to wildlife.
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Name	Status	Habitat Information	Known Economic Importance
CYPERACEAE			
Carex microptera Mackenzie Fremont, ID; T13N R45E SEC 11 NW 4; 7750	common	Lakeshores, riverbanks, to exposed subalpin ridges of Mt. Two Top. Very common & widely distributed; with Carex hoodii, Carex aquatilis, and Luzula parvitlora; or with Carex phaeocephhla, Phaeelia serice and Pinus albicaulis.	important ingredient in wild hay; excellent graze; spring food for
Carex phaeocephala Piper Fremont, ID; T15N R44E SEC 16 SE 12; 8700'	rare	Rocky summit area of Mt. Two Top; with Sedum lanceolata, Phacelia sericea, Phlox multiflora, and Haplopappus acaulis.	Same as above.
Carex raynoldsii Devey Gallatin, MF; T14S R5E SEC 19 NE 1/2; 6800'	common	Moist meadows and hillsides; with Antennar corymbosa, Carex rossii, and Ribes lacustre to subalpine ridges and meadows on Mt. Two Top; with Pinus albicaulis, Potentilla diversifolia, and Poaceae spp.	;
ERICACEAE			
Vaccinium scoparium Leiberg. Gremont, ID; TllN R45E SEC 9 SW 1/2; 7200'	abundant	Open pine woods; with Pinus contorta, Osmorhiza depauperata, Sorbus scopulina, an Prunus virginiana; or with Pinus contorta, Vaccinium caespitosum, and Trisetum wolfii.	Forage value; berries d are edible.
FABACEAE	Service of the servic		
Trifolium haydenii Forter Fremont, ID; T15N R44E 4 SEC 16 SE 1/4; 8700'	rare	In protected saddle between the two peaks of Mt. Two Top; with Pinus albicaulis, Festuca idahoensis, and Symphoricarpos oreophilus.	Not abundant enough to be important, but is eaten by wildlife.
FUMARIACEAE			
Dicentra uniflora Kell: Fremont, ID; T9N R42E SEC 12 SE 1/4; 5500'	very common	Bare, wet ground often below melting snowbanks or on recently snowfree ground; with Fritillaria pudica, Nemophila breviflora and Artemisia tridentata.	Scenic; poisonous to livestock.

Name	Status	Habitat Information	Known Economic Importance
GENTIANACEAE			
Frasera speciose Fremont, ID; SEC 11 SW 7;	TSN R45E	Moist to semi-dry open woods and meadows to 8600' on Mt. Two Top; with Pinus contorta and Poaceae spp.; or with Poaceae spp., Lupinus argenteus, Carex spp., Wyethia amplexicaulis, and Wyethia helianthoides.	Important game browse; poisonous to humans.
GROSSULARIACEAE			
Ribes montigenum McClatchie Fremont, ID; SEC 16 SE 4;	T15N R44E	Among rocks and under Abies lasciocarpa and Pinus albicaulis krumholtz near summit of Mt. Two Top.	Berries edible for wildlife & humans.
HYDROPHYLLACEAE			
Phacelia serice (Gran.) Gray Fremont, ID; SEC 16 SE 4;	T15N R44E	Restricted to exposed ridges near summit of Mt. Two Top; with <u>Haplopappus acaulis</u> , <u>Pinus albicaulis</u> , <u>Clematis hirsutissima</u> and <u>Sedum lanceolata</u> .	Very scenic.
JUNCACEAE			
Juncus hallii Fremont, ID; SEC 15 SW 1/2;	T15N R44E	Moist open hillsides in meadows and clear-cuts; with Stipa pinetorum, Abies lascio-carpa, and Gayophytum diffusum.	Streambank stab- ilization; wild hay; early graze for stock & game.
Juncus mertensis Bong. Fremont, ID; SEC 21 NE ½;	to rare	Bare snowbank areas on north side of Mt. Two Top; with <u>Carex microptera</u> and <u>Juncus confusus</u> ; found only in one location.	Same as above.

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Name	Status	Habitat Information	Known Economic Importance
LILIACEAE			
Erythronium grandiflorum Pursh. Fremont, ID; T15M R44E SEC 15 NE 4; 7800'	common	Moist to wet areas from exposed snowbanks to lush undergrowth in shady woods; with Lewesia pygmaen, Androsace septentrionalis, and Pinus contorta; or with Picea engelmannii, Streptopus amplexifolius, and Ranunculus alismaefolius.	Very scenic; bulbs & leaves edible for humans.
LORANTHACEAE	·		
Arceuthobium americanum Nutt. Teton, Wy; T47N R118W Sec 1 SW 4; 6550'	abundant	Parasitic on <u>Pinus contorta</u> throughout the area.	Very important noxious parasite which destroys or reduces quality of lumbering trees.
Abies lasiocarpa (Nook.) Nutt. Fremont, ID; TION R45E SEC 26 NW 4; 6200	common	Throughout area at mid to higher elevations; usually on sloping ground, but also in moist areas along streams and rivers; with Pinus contorta, Pseudotsuga menziesii, and Populus tremuloides; or with Pinus contorta, Picea engelmannii, and Pinus albicaulis; a climax dominant for much of the study area, but seldom reaching this condition due to the prevalence of Pinus contorta.	Firewood; game cover and winter moose browse.
Picea engelmannii	common	Moist areas along streams and in subalpine	Important lumbering tree; important

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Gallatin, MT;

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SEC 22 NW 1/4;

basins and saddles; found with Pinus contorta,

include Veronica wormskjoldii, Ribes lacustre,

Abies lasiocarpa, and with Pseudotsuga

menziesii. Associated understory species

Rorippa nasturtium-aquaticum, Streptopus amplexifolius, and Equisetum arvense.

wildlife cover and

food source.

Name	Status	Habitat Information	Known / Economic Importance
Pinus albicaulis Engelm. Fremont, ID; T15N R44E SEC 16 SE 4; 8700'	uncommon	Upper slopes and summit area of Mt. Two Top; with Abies lasiocarpa, Phacelia sericea, Sedum lanceolatum, and Festuca idahoensis.	Game cover & food source.
Pinus contorta Dougl. Teton, Wy; T47N R118W SEC 1 SW 1/2; 6550'	abundant	Widespread; the visually dominant plant in the study area; often replaced by other conifers on cool moist sloping ground and at high elevation (Mt. Two Top); replaced by Populus tremuloides on rocky outcroppings and old lava flows. Occurs with all other conifers. Understory associates include Arnica cordifolia, Carex geyeri, Váccinium scoparium, Sorbus scopulina, and Prunus virginiana.	The most important lumbering tree in the area; game cover and food source; firewood.
POACEAE			
Agropyron caninum (L.) Beauv. Fremont, ID; T11N R45E SEC 9 SW 4; 7200'	common to abundant	Widespread; roadsides, meadows, clearcuts and sagebrush flats; with Agrostis scabra, Solidago nana, and Carex douglasii; or with Poa palustris, Geranium viscosissimum, and Helianthelia uniflora; or with Artemisia tridentata, Festuca idahoensis, and Chrysothamnus viscidiflorus.	Grazing, forage, erosion control, soil builder, seeds food source for small game & birds.
Agropyron spicatum (Pursh) Scribn. Gallatin, MT; T14S R5E SEC 19 NE 4; 6800'	common	Dry to moist meadows, open hillsides and sage- brush flats; with <u>Crepis acuminata</u> ; or with <u>Festuca idahoensis</u> , <u>Besseya wyomingensis</u> , <u>Phaceli</u> <u>sericea</u> , and <u>Artemisia tridentata</u> .	Same as above.

Name	Status	Habitat Information	Known Economic Importance
Agrostis variabilis Rydb; Fremont, ID; T15N R44E SEC 16 SE 4; 8650	common	Moist rocky areas and along streams at higher elevations; with Woodsia scopulina, Valeriana acutiloba, and Rubus idaeus; or with Agrostis idahoensis, Viola palustris, and Salix spp.	Same as above (minor)
Festuca idahoensis Elmer Fremont, ID; T14N R44E SEC 20 SW 1/4; 6400		Widespread in dry to moist meadows and along roadsides at all elevations; with Poa pratensis, Stipa occidentalis, and Relianthella uniflora; or with Artemisia tridentata, Bromus carinatus, and Linum perenne; or with Artemisia tridentata, Phacelia sericea, and Pinus albicaulis.	Same as above (major).
Poa juncifolia Scribn. Fremont, ID; T15N R44E SEC 16 SE ½; 8700'	rare	Bare rocky summit of Mt. Two Top; with Phacelia sericea, Sedum lanceolatum, and Eriogonum umbellatum; found only at one location.	Same as above (minor).
Poa reflexa Vasey & Scribn. Gallatin, MT; T14S R4E SEC 23 NE 4; 7400'		Cool, moist, open woods and adjacent clear-cuts; with Mimulus lewisii, Gayophytum diffusum, Agoseris aurantiaca, and Epilobium alpinum; or with Abies lasiocarpa, Pinus albicaulis, Festuca idahoensis, and Stipa pinetorum.	Same as above.
Stipa occidentalis Thuro. Fremont, ID; T10N R43-E SEC 8 SE 2; 6100'	common to abundant	Widespread in moist meadows and open woods; with Poa pratensis, Melica spectabilis, Geranium viscosissimum, and Hackelia micrantha.	Same as above.
Stipa pinetorum Jones Fremont, ID; T15N R44E SEC 16 SE 4; 8700'	common	Bare areas in moist to dry meadows, clearcuts and subalpine parkland; with Artemisia tridentata, Cryptantha torreyana, and Carex deweyana; or with Abies lasiocarpa, Pinus albicaulis, and Phacelia sericea.	Same as above.

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Name	Status	Habitat Information	Economic Importance
POLEMONIACEAE	• •		
Collomia linearis Nutt.	abundant	Widespread in bare open areas; with	
Fremont, ID; T10N R43E		Cryptantha torreyana, Gayophytum diffusum,	
SEC 17 NE 1; 5800'		Linanthus septentrionalis, and Lupinus	· V
	, i	argenteus.	
	•		
Linanthus septentrionalis	common.	Habitat similar to that of Collomia linearis;	Scenic.
Mason Fremont, ID; T10N R42E		with Collomia linearis, Cryptantha torreyana, and Gayophytum diffusum.	
SEC 13 NW 4; 6160'		THE VICE OF THE COLOR OF THE CO	
Phlox multiflora A.Nels.		Dry sagebrush flats and hillsides; also	Scenic; soil builder.
Fremont, ID; T15N R44E		scattered in dry subalpine streambeds; with	
SEC 16 SE 4; 8700'	•	Artemisia tridentata, Chrysothamnus	
	,	nauscosus, and Poaceae spp.; or with Phacelia sericea, Eriogonum umbellatum, and	
		Sedum lanceolatum; or with Pinus contorta,	
		Dodecatheon pulchellum, and Aster alpigenus.	
POLYCONACEAE			
	•		
Eriogonum umbellatum	common	Two forms: dwarf plants with compact	Forage value for
Torr.		head-like inflorescences at summit of Mt. Two	wildlife.
Fremont, ID; T15N R44E SEC 16 SE 4; 8700	s	Top; with <u>Phacelia sericea</u> , <u>Pinus albicaulis</u> , <u>Penstemon procerus</u> , and Artemisia tridentata;	
320 23 32 3, 0,00		or more well developed plants with open	
		inflorescences in sagebrush flats; with	
		Artemisia tridentata, Eriogonum heracleoides,	
		Eriophyllum lanatum, and Castilleja	
		longispica.	
Oxyria digyna (L.)	rare	Bare rocky snowbank areas on north side of	Above-ground parts
Hill.		Mt. Two Top; with Ranunculus eschscholtzii,	good raw or cooked;
Fremont, ID: T15N R44E		Lewesii pygmaea, and Androsace septentrionalis;	some forage.
SEC 21 NE 4; 8600'		found only at one location.	
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Name		Status	Habitat Information	Economic Importance
FOLYGONACEAE				
Rumex paucifol Fremont, ID;		common	Widespread in moist areas, open woods, meadows, subalpine streambanks, and	Good in salads; browsed by mammals &
SEC 8 SE 4;			clearcuts; with Pinus contorta, Antennaria microphylla, and Arnica cordifolia;	birds.
		·	or with Polygonum bistortoides, Pedicularis groenlandica, Sibbaldia	
	•		procumbens, and Spraguea umbellata; or with Castilleja cusickii, Penstemon	
POLYPODIACEAE			procerus, and <u>Carex aquatilis</u> .	
Cystopteris fr (L.) Zernh. Fremont, ID; SEC 8 SE 1/4;	TION R43E	common	Shady rockslides and cliff crevices; with Clematis columbiana, Dodecatheon pulchellum, and Fritillaria atropurpurea; or with Erigeron acris and Ribes lacustre.	
PORTULACACEAE				
Lewisia pygmae Robins. Fremont, ID; SEC 16 SE 坛;	T15N R44E	uncommon	Snowbank areas on north side of Mt. Two Top; with Oxyria digyna, Androsace septentrionalis, and Erythronium grandi- florum; also occasional in subalpine	Roots edible for humans.
PRIMULACEAE.			dry streambeds.	
Androsace sept L. Fremont, ID; SEC 20 NW %;		uncommon	Bare snowbank areas on Mt. Two Top; with Oxyria digyna, Lewesii pygmaea, and Ranunculus eschscholtzii.	Scenic.

\cdot	Known
Name Status Habitat Information	Economic Importance

RANUNCULACEAE

Clematis Hirsutissima uncommon Pursh
Gallatin, MT; T14S R5E
SEC 19 NE ½: 6800'

Aquilegia flavescens Wats. common Gallatin, MT; T14S R4E . SEC 23 NE ½: 7400'

Ranunculus eschscholtzii rare Schlecht. Fremont, ID; T15N R44E SEC 21 NE %; 8600'

ROSACEAE

Geum triflorum Pursh common Fremont, ID; T10N R43E; SEC 8 SE 4; 5900'

Potentilla diversifolia common Lehm. Fremont, ID; T14N R44E SEC 20 SW 4; 6400° Rocky streambank meadows; also near the summit of Mt. Two Top; with <u>Carex raynoldsii</u>, <u>Rumex salicifolius and Potentilla diversifolia</u>.

Open areas from meadows, rockslides and Very scenic. clearcuts to rock crevices at the south summit of Mt. Two Top; with <u>Gayophytum</u> diffusum, <u>Agoseris glauca and Symphoricarpos orpophilus</u>; or with <u>Rubus idaeus</u>, <u>Valeriana</u> acutiloba and <u>Phacelia sericpa</u>.

Very scenic,

Bare snowbank areas on north side of Mt. Two Top; with Oxyria digyna, Androsace septentrionalis and Lewisia pygmaea.

Open rocky outcroppings along the Snake River and in subalpine meadows on slopes of Mt. Two Top; with Antennaria microphylla, Chenopodium fremontii and Symphoricarpos oreophilus; or with Artemisia tridentata, Antennaria corymbosa and Abies lasciocarpa.

Moist, open meadows; with <u>Fotentilla gracilis</u>, Some forage value.

<u>Senecio integerrimus and Bromus carinatus</u>;

or with <u>carex aquatilis</u>, <u>Penstemon procerus</u>,

<u>Castilleja cusickii</u>, and <u>Rumex paucifolius</u>;

or with <u>Artemisia tridentata</u>, <u>Abies lasciocarpa</u>

and <u>Antennaria corymbosa</u>.

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Name	Status	Habitat Information	Economic Importance
Rubus idaeus L. Fremont, ID; T9N R44 SEC 3 SE 4; 5500'	common E	Widespread in rocky areas; open woods, streambanks, and subalpinecrest of Mt. Two Top, with Erigeron acris	Fruit readily eaten by man and animals; leaves make good tea.
320 3 32 4, 3300		and Woodsia scopulina; or with Agrostis variabilis, Valeriana acutiloba and Ribes montigenum.	make good cent
Sibbaldia procumbeus L Fremont, ID; T12N R4 SEC 23 SW 4; 7750'		Along banks of subalpine streambeds at higher elevations and in snowbank areas on Mt. Two Top, with <u>Dodecatheon</u> pulchellum, <u>Polygonum bistortoides</u> and <u>Viola adunca</u> ; or with <u>Juneus mertensianus</u> , <u>Carex microptera and Ranunculus eschscholtzii</u> .	
SAXIFRAGACEAE			
Heuchera parvifolia Nu Fremont, ID; T10N R4 SEC 8 SE ½; 5900'		Rocky outcroppings along riverbanks and at summit of Mt. Two Top; with Antennaria microphylla, Amelanchier alnifolia and Arenaria congesta; or with Phacelia sericea, Sedum lanceolatum and Haplopappus acaulis.	Limited forage value.
SCROPHULARIACEAE			
Eesseya wyomingensis (A. Nels.) Rydb. Fremont, ID; T15N R4 SEC 16 SE 坛; 8700'	rare 4E	Rocky summit of Mt. Two Top; with Heuchera parvifolia, Haplopappus acaulis, Phacelia sericea and Eriogonum umbellatum.	Limited forage value.
Collinsia parviflora Lindl. Fremont, ID; TION R4 SEC 8 SE 4; 6000'	common	Moist open areas in meadows and woods, and along roadsides; with Linanthus septentrionalis, Lomatium ambiguum, and Gayophytum diffusum; or with Pinus contorta, Fragaria virginiana, Arnica cordifolia and Thalictrum occidentale.	Scenic; limited early spring forage.

Name	Status	Habitat Information	Known Economic Importance
Pedicularis racemosa	9		
Dougl.			
Gallatin, MT; T145 R4E	common	Open woods at higher elevations with	Scenic.
SEC 22 NW 4; 7600	•	Pinus contorta, Vaccinium scoparium	
		and Arnica latifolia; or with Picea	•
		engelmanii, Abics lasciocarpa and	
.•		Vaccinium scoparium.	e e e e e e e e e e e e e e e e e e e
Penstemon procerus	common .	Moist meadows and clearcuts to rocky	
Dougl.	•	outcroppings at summit of Mt. Two	
Fremont, ID; TllN R42E	i •	Top; with Lupinus argenteus, Geranium	
SEC 6 NE 4; 6400'	•	viscosissimum and Gayophytum diffusum;	
		or with Potentilla gracilis, Carex	
		simulata and Rumex paucifolius; or with	
	•	Antennaria umbrinella, Phacelia sericea	-
		and Erigeron compositus.	
			,
•	• • • • • •		
Viola pupurea Kell.	common	Open south facing slopes in sparse	Same as above.
Fremont, ID; T12N R45E	•	vegetation; with Dodecatheon pulchellum,	
SEC 28 S ½; 7400'		Phlox multiflora, Carex rossii, and	
		Artemisia ludoviciana.	

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INTRODUCTION

This is a report concerning a plant survey and a search for certain threatened or endangered plants in the Island Park Geothermal Area, legally described as follows:

Beginning at the NE corner of Section 3, T. 14 S., R. 5 E., in Gallatin County, Montana; thence west to the NW corner of Section 4, T. 14 S., R. 5 E., thence north to the secondary road on the west boundary of Section 33, T. 13 S., R. 5 E.; thence west along same road through Sections 32 and 31, T. 13 S., R. 5 E. to the rangeline between R. 4 E. and R. 5 E.; thence north to the South Fork of the Madison River; thence downstream to U.S. Highway 191/20; thence east and southerly along said highway past Flat Rock Guard Station, Idaho, to the north boundary T. 13 N.; thence west to rangeline between R. 42 E. and R. 43 E.; thence southerly and westerly along the National Forest boundary to the 10th Auxiliary Meridian, Idaho; thence south and easterly along forest boundary to the NE corner of T. 10 N., R 41 E.; thence south to the NE corner of T. 9 N., R. 41 E.; thence east to Rattlesnake Creek; thence downstream to the Snake River (Ashton Reservoir); thence upstream to the confluence of Warm River, thence up Warm River to Highway 47 bridge; thence east to Forest boundary; thence east and southerly along Forest boundary to Conant. Creek; thence upstream into Wyoming to the rangeline between R. 118 W. and R. 117 W.; thence north to Yellowstone National Park boundary; thence west along National Park boundary to the SW corner of Yellowstone National Park; thence north (approximately 35 miles) to the point of origin.

The purpose of this report is twofold; first to provide opinions on the status of threatened or endangered plants specifically sought in the field, and second, to provide as complete a plant list as possible for the area. A brief description of the area and an account of field and laboratory work will be followed by a discussion of the threatened or endangered plants specifically sought in the field. This account will then be considered in defining areas of importance for continued study.

A list of plants collected and identified from the areas is appended at the end of the report. Preceding the list is a description of the vegetation zones by which the plants are listed, along with a collection

of 30 color photographs showing examples of some habitats and some of the more striking plants of the area.

DESCRIPTION OF AREA

The Island Park Geothermal area consists primarily of a high plateau lying to the west and south of Yellowstone Park. The central part of the area is drained by Henry's Fork of the Snake River which originates within the area at Big Springs and flows southward through a spectacular canyon before entering the northern edge of the Snake River Plain near the town of Ashton. On the west, this sector is characterized by gentle terrain broken near its boundary by several buttes and ridges. On the east the land rises towards the even higher Madison Plateau of southwestern Yellowstone Park. This eastern region is cut by numerous canyons which drain the Madison Plateau and which either empty directly into the Snake River or into the Warm River which meets the Snake as it leaves the area to the south.

The northern part of the area lies east of the Continental Divide, and is drained by the Madison River. This sector consists mostly of the immediate eastern slope of the Continental Divide. Between it and the central sector lies Mt. Two Top, which at 8710 feet, is the highest point in the study area.

To the south is a region drained primarily by the Falls River and its tributaries. This sector is characterized by gentle relief — cut occasionally by fairly steep canyons— and numerous lakes, including Indian Lake, a major breeding area of the trumpeter swan. This sector is separated from the central sector by the steep canyon walls of Robinson Creek.

The area as a whole totals nearly half a million acres, and is relatively homogeneous vegetatively. It is mostly forested with Lodge-pole Pine although stands of Douglas Fir and Subalpine Fir thrive in suitable areas.

METHODS

Work on the study involved planning by Karl Holte, PhD., and Fred Rose, PhD., in the spring of 1977. Following the planning stage field work and plant identification was primarily carried out by Gordon Whitehead, M.A. candidate. After identifications were made the plants were determined by Dr. Holte who also was involved earlier in field searches and identification on an occasional basis.

Excluding travel time to and from the area, a total of thirtyseven days were spent in the field searching for and collecting plants. Field work occurred during twelve of the thirteen weeks between June seventeenth and September thirteenth, 1977. Most of the field work was accomplished during the early part of this period, a time which coincided generally with the largest number of plants in flower and specifically with the phenologies of most of the threatened or endangered plants under consideration. During this part of the study the only time spent in the laboratory was for the purpose of drying and boxing plants and, in one case, for doing identification work necessary to facilitate collecting. Later in the season field trips were limited to weekends during breaks in the routine at Idaho State University. Interspersed with this latter period of field work, plants were sorted and tentatively identified at the Ray J. Davis Herbarium at Idaho State for the purpose of writing a preliminary report. Following completion of the preliminary report, final identification work, including thorough herbarium checking and determination procedures, was completed.

Basic stategy in the field reflected the dual nature of the study. Sites were selected for search over a broad area and were fairly evenly distributed. It was felt that by this approach isolated "islands" of habitat suitable for certain rare plants would be less likely to be missed. On the other hand, thorough collecting of more common plants required a less diffuse approach. That is, it was felt that a thorough search of a few areas for common plants would reduce time lost in travel and in handling of equipment. For this reason some areas were searched intensively. In order to maximize the chances of finding rare plants during these intensive searches, such areas were chosen, when possible, to coincide with habitats most similar to those of rare plants.

CLIMATIC FACTORS

The spring and summer of 1977 was heavily affected by the drought of the preceding winter. Early snow melt, due to lack of accumulation, as well as other factors related to unusually dry conditions, caused poor seed germination of annuals and appears to have resulted in earlier than normal blooming for other spring flowers. As a result, some of the usual spring flora may have withered by the time field studies got underway.

RARE PLANT CONSIDERATIONS

As directed by contract, the following plants were specifically sought in habitats which occur in the study area and which are similar to habitats where these plants are known to be found:

Antennaria arcuata
Arabis fruticosa
Cymopteris nivalis
Oenothera psammophila *
Aquilegia jonesii
Astragalus vexilliflexus var. nubilis
Chaenactis evermanii
Claytonia flava *

(Rare Plant Considerations, cont.)

Cryptantha hypsophila *
Draba argyrae
Draba sphaerocarpa
Synthyris hendersonii *

Those plants which have been identified from field collections (see appended list) do not include any plants from the above mentioned list; nor do they include any plants listed as threatened or endangered in Endangered and Threatened Plants of Idaho (Henderson, et.al.), the most recent list of such plants for the state.

Of the twelve threatened or endangered plants sought, eight —

Cymopteris nivalis, Aquilegia jonesii, Astragalus vexilliflexus, Chaenactis

evermanii, Dryptantha hypsophila, Draba argyrae, Draba sphaerocarpa, and

Synthyris hendersonii — occur mainly or exclusively in high subalpine or

alpine habitats. As can be seen from the habitat descriptions on the

following pages, high subalpine habitats are extremely limited in the

study area, and truly alpine conditions are non-existent. In addition,

Mt. Two Top, which contains the only timberline-like habitats in the area,

was probably the most thoroughly searched site of the study. For these

reasons, as well as the restricted ranges of most of these eight plants,

it is our opinion that they do not inhabit the study area.

Arabis fruticosa is known only from the type specimen collected at Mammoth Hot Springs in Yellowstone Park. Both Dr. de Spain, the Park Biologist, and Dr. Reed Rollins, who monographed the genus Arabis, searched for this plant without success in the type locality. Also,

^{*} Listed in Hitchcock and Cronquist, Flora of the Pacific Northwest as:

Oenothera caespitosa var. pramnophila

Claytonia lanceolata var. flava

Cryptantha nubigena

Synthyris pinnatifida

thorough collection of plants in this genus along roadsides and in other areas produced no specimens which fit the description of this species.

Based on this information, it is our opinion that this plant does not inhabit the study area.

Antennaria arcuata has been found in Idaho only in the type locality. Searches of similar habitats in the sagebrush-grass zone of the study area were conducted without success. Based on these searches and on the very restricted range of this species, it is our opinion that this plant does not inhabit the study area.

Oenothera psammophila is known to exist within 25 miles of the study area boundary. Also the sand dunes which it inhabits extend to within 10 miles of the area. Apparent lack of dune habitats within the study area makes the presence of this species unlikely. Nevertheless, since it may have bloomed in early spring at a time not coinciding with field searches, some doubt still remains as to its status in the area. If it does exist in the area, it is probably extremely rare.

Claytonia flava is known to exist around Henry's Lake in a habitat which is essentially contiguous with similar habitats in the study area — in or along Henry's Lake flats. Although several searches in this particular area were fruitless, its early spring blooming time leaves considerable question as to the status of Claytonia flava within the study area. In addition, its presence in a habitat similar to and adjacent to the study area would make its presence seem likely.

The conclusions reached in this section are summarized in the following table which lists opinions on the status in the study area of each species, along with reasons for each conclusion.

PLANT PRO	DBABLE STATUS IN THE AREA	REASONS CITED
Antennaria arcuata	does not inhabit	Restriction of range. Field searches.
Arabis fruticosa	does not inhabit	No longer locatable in type locality. Field searches.
Cymopteris nivalis	does not inhabit	Lack of habitat. Field searches.
Oenothera psammophila	uncertain (doubtful)	Lack of a spring flora. Proximity of known population.
Aquilegia jonesii	does not inhabit	Lack of habitat. Field searches.
Astragalus vexilliflexus	does not inhabit	Lack of habitat. Field searches.
Chaenactis evermanii	does not inhabit	Lack of habitat. Field searches.
Claytonia flava	uncertain (likely)	Lack of a spring flora. Presence of good habitat. Proximity of known population.
Cryptantha hypsophila	does not inhabit	Lack of habitat. Field searches.
Draba argyrae	does not inhabit	Lack of habitat. Field searches.
Draba sphaerocarpa	does not inhabit	Lack of habitat. Field searches.
Synthyris hendersonii	does not inhabit	Lack of habitat.

Field searches.

At this point it seems fairly clear that further study will be necessary to ascertain the status of two of the above listed plants in relation to the study area. These plants are <u>Oenothera psammophila</u> and <u>Claytonia flava</u>. Both are known to bloom in the early spring, and may well have been affected by this year's drought. Moreover, <u>Claytonia flava</u> is most strongly suspected in an area grazed by cattle and horses, so plants may have been destroyed in this fashion before discovery could be effected. Additionally, both of these plants are known from Fremont County, Idaho, from habitats that are close, if not directly adjacent, to the Geothermal area. Therefore, one would have an increased expectation of their presence in that area.

In light of these facts, we suggest that further study should include field search directed at obtaining a spring flora with specific attention to those areas most likely to contain the two species mentioned here. Further advantages of such a search would include:

- (1) the enhancement of the collection already made by supplementing it with both spring flora not collected and with early blooming flora for which we have only fruiting stages or remnants as representatives;
- (2) an increase in search intensity for the area as a whole, thus reducing the probability of a very rare plant being overlooked, and
- (3) an increase in accuracy of identification within certain difficult genera, such as willows, for which spring flowers are necessary for a thorough identification procedure.

Three vegetation zones were delineated within the study area for the purposes of listing plants. These are based on the general scheme of Davis (1952). The zones are as follows:

Zone 1: Sagebrush-grass zone

This zone essentially includes that part of the study area which overlaps the Snake River Plain. It is bounded by the Snake River and Rattlesnake Creek on the south, and by the beginning of coniferous forests—at 5500 to 6000 feet—on the north. This zone is characterized by sagebrush hills which rise from the Snake River to the forests at higher elevations. Much of the area is cultivated or otherwise developed by man, and many of the plants collected from the area reflect this disturbance. Characteristic plants include Artemesia tridentata, Artemesia tripartita, Chrysothamnus nauseosus, Chrysothamnus viscidiflorus, Juniperus scopulorum, Linum perenne, Lithospermum ruderale, Chenopodium album, Kochia scoparia, Elymus cinereus, and Helianthus annuus.

Zone 2: Douglas Fir, Spruce-Fir zone

This zone includes all of the study area except for that part which overlaps the Snake River Plain and except for the upper slopes of Mr. Two Top occupied by Whitebark Pine (Pinus albicaulis). In this case, two zones — the Douglas Fir zone and the Spruce-Fir zone— listed by Davis are combined. Regarding the compiling of a plant list, there are several reasons for doing this. First, Lodgepole Pine (Pinus contorta) exists as a persistent seral stage, and possibly as a topographic or edaphic climax, in both zones throughout most of the study area and obscures the distinctions between them. Additionally, and partly as a result of this situation, a large percentage of understory and adjacent meadowland

species have ranges which overlap both zones thus reducing the advantage gained by separate lists.

Characteristic canopy species for Zone 2 include <u>Pinus contorta</u>,

<u>Pseudotsuga menziesii</u> (Douglas Fir), <u>Abies lasciocarpa</u> (Subalpine Fir),

<u>Picea engelmannii</u> (Engelmann spruce), and <u>Populus tremuloides</u> (Quaking Aspen).

Characteristic understory shrubs include <u>Sorbus</u> <u>scopulina</u>,

<u>Prunus virginiana</u>, <u>Amelanchier alnifolia</u>, <u>Symphoricarpos</u> <u>oreophilus</u>, and

Vaccinium spp.

Characteristic understory and meadowland herbs include

Geranium viscosissimum, Frasera speciosa, Lupinus argenteus, Arnica

cordifolia, Arnica latifolia, Mimulus guttatus, Mimulus lewesii, Castilleja

miniata, Potentilla gracilis, Pedicularis groenlandica, Pedicularis

racemosa, Habenaria dilatata, and Viola adunca.

Zone 2 also contains a significant number of dry sagebrush flats -dominated by Artemesia tridentata -- which gave affinities to the flora
of Zone 1, but which are surrounded by forest habitats and are thus
retained within Zone 2 for the purposes of the list.

Zone 3: Upper timberline zone

This zone occurs only on the upper slopes of Mt. Two Top.

It is distinguished by scattered, often stunted, trees, snowbank areas, and exposed rocky ridgetops. It is defined for the purposes of the list by the presence of Whitebark Pine (Pinus albicaulis). Judging from higher nearby peaks, true alpine habitats in the region begin somewhere above 9,000 feet. At 8,710 feet, Mt. Two Top remains technically in the Spruce-Fir zone. Nevertheless, separation of this area as a distinct zone serves to recognize the habitat peculiarities of the several high mountain species which inhabit the area, and to emphasize the limited

extent of these types of habitats within the area being surveyed.

Characteristic species for this zone include <u>Pinus albicaulis</u>,

<u>Abies lasciocarpa</u>, <u>Phacelia sericea</u>, <u>Antennaria umbrinella</u>, <u>Penstemon</u>

<u>procerus</u>, <u>Haplopappus acaulis</u>, <u>Lewesia pygmaea</u>, <u>Oxyria digyna</u>, <u>Erythronium grandiflorum</u>, <u>Carex mertensiana</u>, <u>Ranunculus eschscholtzii</u>, and <u>Androsace</u> septentrionalis.

Beginning on the following page is a section of 30 photographs showing a selection of habitats and associated plants which occur within the three zones described above. The photographs are ordered progressively from Zone 1 to Zone 3. By looking through the section in order, the reader will hopefully get an impression of the three zones and the variety of habitats and plants which occur within each.